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Los Angeles Oil Headquarters of Nation During A. P. I. Meeting

By V. B. Guthrie
Managing Editor

LOS ANGELES, Jan. 19

REGISTRATIONS and banquet reservations Jan. 18 pointed to the biggest attendance at Los Angeles of any annual convention of the American Petroleum Institute. Oil men from all over the country have been arriving for several days and the appearance of the lobby of the Biltmore already is that of a convention in full swing.

Two subjects seem to be of outstanding interest to the oil men assembling. Visitors from east of the Rockies are anxious to form their impressions as to the effect the California oil fields and refineries may exert on the general market situation during 1926, and of course everyone is wondering what, if any discussion will come up at the Institute meeting on the report on petroleum supply and demand of the Committee of Eleven of the Institute to the Federal Oil Conservation Board which has been a source of more or less controversy since its presentation last summer.

California Industry Interests Many

Mindful of the break in the gasoline markets in the east brought about late last summer by the influx of California gasoline and California crude shipped through the Canal to Gulf and Atlantic Coast refining and distributing points, visitors are inquiring what the industry may expect from California this year. Many Eastern refiners and jobbers and marketers are planning to stay on the coast long enough to form their own opinions on these points. The general impression seems to be that California will be in a position to ship as much oil back east as in 1925 at least and that shipments are being held back just at present waiting upon only a more favorable relationship between the retail markets back east and on the Pacific Coast which latter factor governs the refinery price of gasoline here.

The committee on public relations was unable to hold its scheduled meeting Jan. 18, so few members of the committee being present in Los Angeles. An informal discussion was held with Judson C. Welliver, who has recently been appointed to the Institute staff to handle the public relations work, and a formal meeting of the committee will be held later during the Institute meeting.

There is speculation as to how the discussion of the Committee of Eleven report may come before the Institute meeting it may be brought up in one or more of the group sessions possibly, but this will be in an unofficial manner that would probably not be given general consideration. No place is provided for such discussion on any of the general sessions. To come before the attention of the Institute here the subject would have to be brought up from the floor in the form of a question. How the subject would be handled in such an event would depend on the particular presiding officer at that session.

Although not scheduled on the formal program it was announced Jan. 18 that a meeting of the Committee of Eleven would be held that afternoon, in the form of a general conference on the status of the report, the meeting to be open only to members of the committee. Not enough members of the committee were present to form a quorum at this time however, and the committee meeting was postponed until Jan. 20.

Pew Mentions Report

In his formal address at the general session the afternoon of the 19th, President J. Edgar Pew discussed the Committee of Eleven report as one phase of the Institute's work the past year. In this connection he said:

"At the first meeting of your board last year, there were considered a letter written by the President of the United States, in reference to the oil situation, and the appointment by him of a board consisting of four cabinet officers, who were requested to examine into and report to him upon the sufficiency of the necessary supply of oil and as to the necessity for conservation measures.

"The directors of the Institute recognized the importance of the inquiry and welcomed the opportunity to assist this distinguished board in its work. The services of the Institute were offered and accepted, with the expressed purpose of finding what the facts were in regard to the oil industry of the benefit of President's board, of the members of the Institute and of the industry. It was also admitted by the board at Washington that the facts pertaining to the industry thus collected would be helpful to those to whom questionnaires were being directed in making their answers. These questionnaires called for answers and opinions which could only be based upon a better knowledge of the facts of the industry in all its branches and localities, than was possessed by but few, if any.

Praises Industry's Cooperation

"To make this report, a committee of eleven was appointed, consisting of nine members of the Institute representing the different branches of the industry and all sections of the country, in which the industry was operating, the president and secretary of the Institute completing the committee. I had the responsibility of appointing the nine members of this committee and I am of the opinion that no committee has ever served this or any organization more faithfully. They were selected wholly with reference to their qualifications for the service required.

"These together with the large number of sub-committeemen, worked for months and traveled extensively. Vast amounts of data and confidential information were freely asked for and freely given. Experts outside the industry were

called upon and their services used. All of this was practically without cost or expense to the Institute. The Institute is deeply indebted to all these gentlemen for their splendid services and to the companies which gave their services, and to all of these companies from which much valuable data were obtained and which was, in many cases confidential to their own organizations.

"The report of the Committee of Eleven does not attempt to give the amount of oil that will be produced in this country from any undiscovered fields. All such attempts in the past have been futile, and necessarily so, because of the very nature of the oil industry. Oil cannot be known to exist in any place before it is actually discovered by the drill, and these discoveries are regulated by the law of supply and demand, as is much of the production from the known oil in sands already discovered.

"Deeper drilling, more intensive drilling in territories where the sands are irregular, and better recovery of oil by other than the usual production methods as well as the testing of the vast unexplored areas where oil may exist and where the sand conditions are known to exist, are all operations which can only take place when a price condition for oil products is had that will justify such expenditure. It is the way oil has always been produced, and the way we will continue to supply the needed oil for the future. Other substitutes, such as shale oil, distillates from coal, and other uses of coal, the development of the production of alcohol products, these together with more economical uses of oils, all form a safe background that furnishes assurance to the country and the public that no calamitous condition is in prospect from any cessation of oil supplies or of their substitutes. These sources are all capable of infinite development that will only come when conditions demand and price justifies.

"The report of the Committee of Eleven shows these conditions and should set at rest any anxiety for the future supply of our products.

Minimum of Waste

"The report also shows that considering the conditions under which oil is necessarily produced, and the volatile character of the product there is a minimum of waste, and that this condition is being bettered, that the losses are now less than in the past, both in the production of oil and in the manufacture of oil products. Great advances have been made in methods of production and in the conservation of the product within the past few years, and advances are being made continually, bringing about better economies in practices in all kinds within the industry.

"Your Committe of Eleven has been continued by the board of directors, and has advised the president's board at Washington of its desire to assist it in any further manner it may suggest.

"The committee's work with the President's board has been pleasant and harmonious and I am confident this honorable board has no other purpose than to gather the facts about the oil industry, and with these before it, will make a report consistent with these facts. Such a report will be welcomed by the entire industry."

Extend Statistical Work

President Pew pointed to an extension by the Institute in the future of its statistical work to include perhaps a weekly refinery report on refinery operations as soon as cooperation of sufficient companies can be had in supplying data to make such a report possible.

"A weekly collection of all these data, including the oil run to stills, will add much to the value of the reports. I hope the cooperation of all will be had in this effort to enable the Institute to render this service."

At the Tuesday afternoon session T. A. O'Donnell, president of the Institute for five years until the election of Mr. Pew made an address of welcome on behalf of the California companies. An address by Paul Shoup, president of the Pacific and Associated Oil Companies, was read, Mr. Shoup being unable to be present, being held in the East on business in connection with the consolidation of the Pacific Oil Co. with the Standard of California.

California oil men have been most active in preparing for the comfort and entertainment of visitors and a full week of business and sightseeing is in prospect.

Coming Meetings

Michigan Independent Oil Men's Association, Detroit, Mich., Jan. 21, 22.

Oklahoma Oil Jobbers Association, Oklahoma City, Okla., Jan. 21.

Iowa Independent Oil Men's Association, Hotel Ft. Des Moines, Des Moines, Ia., Feb. 9, 10.

Ohio Petroleum Marketers Association, New Neil Hotel, Columbus, O., Feb. 11, 12.

Georgia, Alabama and Florida jobbers to meet to organize association, Hotel Ansley, Atlanta, Ga., Feb. 15, 16.

Wisconsin Independent Oil Jobbers Association, Hotel Lorraine, Madison, Wis., Feb. 17.

American Institute of Mining and Metallurgical Engineers, New York City, Feb. 15, 16, 17, 18.

Western Petroleum Refiners Association, Texas Hotel, Fort Worth, Tex., March 2, 3, 4.

National Petroleum Marketers Association, Congress Hotel, Chicago, April 6, 7, 8.

Petroleum Division, American Chemical Society, Tulsa, April 5. 6, 7, 8, 9.

Memorial Service Held For A. C. Bedford

LOS ANGELES, Jan. 19.—A tribute to the late A. C. Bedford as a great industrial leader, realizing the dawning of a period in which the rights and privileges of the individual worker were to have greater recognition, and himself striving to further that trend in industrial thought was paid by Mark L. Requa in an address at the memorial service for Mr. Bedford held by the American Petroleum Institute at its evening session today.

Mr. Requa was particularly fitted to speak in honor of Mr. Bedford for as director of the oil division of the U. S. Fuel Administration it was given him to be in close contact with Mr. Bedford during the stress of the war work which brought to the front his rare personal qualities.

"Mr. Bedford was a great industrialist," said Mr. Requa, "but he was more than that; his broad vision his sympathetic understanding of mass phsychology, his realization of the complexities attendant upon modern scientific development and modern civilization, made him a great leader of men not only in industry but in the social and spiritual side of life as well. He saw the romance and glamour of the industrial age, the possibility for human betterment fascinated him, for he was an altruist quite as much as he was an industrialist.

"In his official capacity he conformed to the new order. He realized that industrial demands had changed and that the new order demanded the winning of public confidence, demanded widespread publicity and an association of the public as stockholders in fullest possible measure. He had seen the old order go down before adverse public opinion, he realized that for better or for worse a new order had come and he conformed to it. I think I can say from personal contact with him that he not only conformed to it but he was in sympathy with it for he realized that modern practices were in final results making for human betterment and for that objective he had always the most intense sympathy."

In telling of the stress of war time conditions which Mr. Bedford faced Mr. Requa brought out facts regarding the plans of the Petroleum War Service Committee, of which Mr. Bedford was chairman, to which the petroleum industry would have been asked to conform had the war lasted into 1919. Domestic consumption of gasoline, for example, was to have been reduced one half. Gasoline was to have been brought from California in solid trainloads, on passenger schedule, in addition to tanker shipments. Closing of some refineries was planned with diversion of crude to the more efficient and better located plants.

Mr. Requa related an instance or two to show how unselfishly with regard to

his own and the other large oil companies Mr. Bedford carried on the work of the petroleum committee. In consolidating purchases for the Allies, he said, "Lest there be any criticism Mr. Bedford agreed that the smaller companies should have whatever portion of the business they wanted and that his own and some of the other larger companies should take all or none of the order, an agreement which was never 'broadcasted' and with which few are familiar."

Chicago Petroleum Club Is Certainty

CHICAGO, Jan. 18.—About 40 Chicago oil men attended the second preliminary meeting of the Chicago Petroleum Club in the Auditorium hotel, Jan. 14. Six days before a group of about 35 had assembled there at the call of C. F. Rosenthall, Apex Motor Fuel Co., to discuss the need of such an organization. The first meeting lunched and adjourned after appointing a committee to deliberate on the needs of an organization of Chicago oil men.

Last Thursday the committee reported favorably, so a Chicago Petroleum Club is assured. After luncheon another committee was appointed to select a list for election as officers at a meeting to be held at noon Jan. 21, at the Auditorium hotel. At present the plan is to make the organization a social luncheon club chiefly.

George C. Peterson, George C. Peterson Co., heads the nominating committee. The other four committeemen are: C. E. Dowd, Lynch-Clarisey Oil Co.; Walter Herr,, Cosden Sales Corp.; F. B. Sherwin, Triangle Oil Co., and R. Q. Howard, James B. Berry's Sons Co. As far as is known now the Auditorium hotel at Michigan Blvd. and Congress St. will be the regular place of meeting.

DECATUR, ILL.—Dick Elliott has taken over the two service stations formerly operated by Wells-Hardisty Co. here.

Believe It or Not—

Staff Special

TULSA, Jan. 18.—It is said that truth is stranger than fiction. For example, with all the highly advertised fire hazards of the oil industry, it was not a tank of oil or a well which recently burned on the Empire's leases at Oil Hill, Kan.

The fire station itself caught fire from some unknown cause and burned to the ground, destroying the protective equipment. As a safety measure the company is now building a non-collapsible, fireproof, asbestos lined fire station, which is to be equipped with water, chemical and foamite apparatus.

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1926 U. S. Gasoline Demand Estimated At 10,547,419,000 Gallons

By Roger B. Stafford
N. P. N. Staff Writer

CLEVELAND, Jan. 19.

THIS, in America, is an age of machines—machines for doing this and that, and machines for conveying one from here to there. The desire to use machines, particularly motor driven vehicles, has increased at a tremendous rate and today there are twice as many automobiles licensed to be operated on the highways of America as there were five years ago.

The demand for motor fuel has grown proportionately, perhaps a little faster as automobiles are being made more comfortable and luxurious year by year and year around motoring is more pleasant. Consumption of gasoline in the United States in 1925 exceeded three quarters of a billion gallons a month. If automobile registration statistics are as reliable a criterion in 1926 as they have been in recent years, domestic demand for gasoline this year will average close to a billion gallons a month and exceed a billion gallons a month in summer.

10,547,419,000 Gallons Estimated

After careful analysis of gasoline consumption figures and automobile registration totals, National Petroleum News estimates domestic demand for gasoline this year will be approximately 10,547,419,000 gallons. Export demand will run close to 1,500,000,000 gallons or a total demand on American refiners of slightly more than 12 billion gallons for the year.

A year ago we predicted that American domestic demand for gasoline in 1925 would be 9,260,403,000 gallons. With United States Bureau of Mines gasoline consumption figures complete for the first 11 months of 1925 and December consumption estimated conservatively at the average decline in demand in December from November during the last five years, we arrive at a total domestic consumption of 9,289,627,000 gallons for all of 1925. Our estimate was thus only .3 of 1 per cent in error. When December gasoline statistics are compiled by the Bureau of Mines, it is doubtful that this preliminary figure will vary more than .1 or .2 of 1 per cent.

The 1926 estimate of probable gasoline consumption is 13.5 per cent greater than the 1925 demand. Weather, prosperity and a few minor factors may alter demand somewhat but taking the country as a whole a decline in consumption in one region may be compensated for by an increase in another part.

20,167,149 Cars Registered

Automobile registrations according to statistics compiled by National Petroleum News from the registration bureaus of the 48 states and the District of Columbia, totaled 20,167,149 passenger cars, trucks, buses and all motor vehicles except motorcycles and tractors. This was an increase of 2,432,642 cars, or 13.7 per cent over the 1924 registration. Gasoline consumption increased 19.6 per cent in 1925 over 1924. The following table shows the increase in automobile registrations in the last 14 years:

1912	1,010,399	1919	7,596,503
1913	1,248,056	1920	9,206,141
1914	1,768,963	1921	10,505,630
1915	2,494,912	1922	12,299,770
1916	3,584,567	1923	15,222,658
1917	4,970,671	1924	17,726,507
1918	6,105,588	1925	20,167,149

Table No. 2 shows the yearly increase in gasoline production, domestic demand, exports and stocks since 1917, or during all the time the Bureau of Mines has been collecting such data. Imports have fluctuated from year to year and it is impossible to predict what 1926 imports may be. Exports demand predictions are a little less hazardous but consumption of gasoline abroad is not growing nearly so fast as United States demand because the market for automobiles is still limited in most countries outside the British Empire.

Table 3 gives production, import, domestic consumption and export statistics for 1925 with December estimated. Table 4 shows the charges to stills at American refineries in the first 11 months of 1925 and an estimate for December.

Probable Amount of Crude

Should the amount of crude charged to stills in 1926 be in the same proportion to 1925 charges as the increased gasoline consumption of 1926 will be to 1925 consumption, approximately 837,000,000 barrels of crude oil would be needed. However, with improved refining methods, increased cracking facilities, and a desire among refiners not to increase stocks of gasoline further, the amount of crude used may fall below 800,000,000 barrels.

The total domestic and foreign crude used at refineries in 1925, December estimated, was 738,056,757 barrels. This was the largest volume in the history of the American oil industry. The 1924 crude charges totaled only 643,719,349 barrels. Charges of unfinished oils and natural gasoline have not been taken into account. Charges of unfinished oils will depend largely on the supply and price of crude oil which govern in part the volume of cracking of gas and fuel oils for gasoline production.

Crude Oil Production

Crude oil production in the United States in the first 11 months of 1925 totalled 695,108,000 barrels. The trend in crude oil production, according to sta-

Table 1.—Comparative Automobile Registration Figures for 1925 and 1924

	Total 1925 Registrations	Passenger Cars 1925	Trucks 1925	Total 1924 Registrations	% of Ch'ge
Alabama	194,580	171,387	23,193	157,262	23.7
Arizona	68,055	58,974	9,081	57,828	17.5
Arkansas	184,291	159,511	24,780	141,983	29.8
California	1,439,463	1,224,887	214,576	1,321,480	
Colorado	244,227	225,372	18,855	213,247	14.5
Connecticut†	257,050	220,360	36,690	214,318	19.9
Delaware	39,840	32,550	7,290	35,136	13.4
Dist. of Columbia	116,652	103,160	13,492	91,726	27.1
Florida†	288,610	239,853	48,757	194,196	48.6
Georgia	247,938	217,423	30,515	209,300	18.7
Idaho	80,744	73,665	7,079	69,225	16.6
Illinois	1,262,734	1,101,500	161,234	1,123,724	12.3
Indiana	720,653	625,538	95,115	650,219	10.8
Iowa	682,544	636,045	46,499	620,906	9.9
Kansas	457,033	409,968	47,065	410,891	8.8
Kentucky†	258,971	232,794	26,177	231,784	11.7
Louisiana††	205,500	175,000	30,500	178,000	15.5
Maine	137,344	113,583	23,761	127,178	7.9
Maryland	242,869	226,406	16,463	195,581	24.1
Massachusetts	776,349	665,869	110,480	672,315	15.4
Michigan	992,667	888,836	103,831	868,587	
Minnesota	569,694	524,879	44,815	502,987	13.2
Mississippi	180,266	162,390	17,876	134,547	33.9
Missouri	602,900	542,314	60,586	544,635	10.7
Montana	94,656	82,135	12,521	79,695	18.7
Nebraska	336,500	300,000	36,500	308,713	9.0
Nevada	21,300	18,000	3,300	18,387	15.8
New Hampshire	81,220	71,220	10,000	71,929	12.9
New Jersey	568,174	457,155	111,019	504,190	12.7
New Mexico	48,636	46,998	1,638	41,750	16.5
New York	1,578,476	1,300,909	277,567	1,412,879	11.7
North Carolina	343,600	312,653	30,947	305,756	12.3
North Dakota	144,936	133,755	11,181	117,061	23.8
Ohio	1,287,000	1,125,000	162,000	1,244,000	3.4
Oklahoma	455,300	425,300	30,000	342,982	32.7
Oregon	215,826	198,928	16,898	192,629	12.0
Pennsylvania	1,355,983	1,162,824	193,159	1,228,586	10.3
Rhode Island	101,848	84,337	17,511	90,652	12.3
South Carolina	170,648	154,383	16,265	163,382	4.4
South Dakota	186,085	154,199	13,886	142,280	30.8
Tennessee	245,789	222,810	22,979	204,680	20.1
Texas	971,756	875,058	96,698	834,040	16.5
Utah	90,422	79,185	11,237	79,233	14.1
Vermont	69,576	64,566	5,010	61,179	13.7
Virginia	280,700	245,000	35,700	261,643	7.2
Washington	328,384	280,989	47,395	294,812	11.3
West Virginia	212,816	186,004	26,812	190,134	11.8
Wisconsin	596,414	530,182	66,232	525,221	8.4
Wyoming	48,120	42,840	5,280	43,639	10.2
Total	20,167,149	17,686,694	2,480,455	17,726,507	13.7

†Dec. 1. ††Nov. 1.

tistics of the American Petroleum Institute, has been downward since the first week of June, 1925, and the total new supply trend has been downward since the last week of May. It is probable that total production in the United States in 1925 was approximately 750,000,000 barrels. Exact figures will be available in about two weeks.

Table 2.—Gasoline Supply and Demand Statistics since 1917 (Gallons)

Year	Production	Imports	Domestic Demand	Exports	Stocks
1918	3,570,312,963	12,899,350	3,129,266,347	568,875,816	297,326,983
1919	3,957,857,097	8,520,169	3,434,812,886	382,098,332	446,793,431
1920	4,882,546,699	40,478,107	4,250,696,163	656,740,237	462,381,837
1921	5,153,549,318	37,816,004	4,516,027,256	551,632,771	586,087,132
1922	6,202,234,613	62,132,651	5,372,085,042	594,576,493	883,792,861
1923	7,555,945,143	191,313,540	6,685,055,280	871,116,614	1,074,899,650
1924	8,953,684,359	134,871,151	7,765,634,741	1,218,317,310	1,179,503,185
1925*	10,849,578,919	160,689,059	9,289,627,042	1,318,586,381	1,694,980,000

*December estimated.

Table 3.—Gasoline Supply and Demand Statistics for 1925 (Gallons)

Month	Domestic Production	Imports	Domestic Consumption	Exports
January	831,652,370	14,447,766	592,866,423	98,961,932
February	790,441,679	12,033,151	533,639,528	103,141,310
March	853,574,214	14,542,865	616,054,197	123,755,783
April	860,492,115	10,241,315	797,304,368	109,750,499
May	922,046,254	16,945,275	831,787,922	101,159,037
June	944,175,287	16,127,687	868,349,604	113,658,820
July	966,908,000	16,845,000	963,072,000	105,107,000
August	972,689,000	13,180,000	931,901,000	124,042,000
September	906,109,000	7,633,000	848,867,000	91,441,000
October	944,433,000	9,009,000	831,774,000	106,570,000
November	922,058,000	15,684,000	758,111,000	118,999,000
December	*935,000,000	*14,000,000	†715,900,000	*120,000,000
Total	10,849,578,919	160,689,059	9,289,627,042	1,318,586,381

†December estimated on basis of decline in December demand from November demand in four preceding years.
*Estimated.

Table 4.—Crude and Other Oils Charged to Stills in 1925 (Barrels)

	Crude Oils Domestic	Crude Oils Foreign	Unfinished Oils	Natural Gasoline	Total
January	54,124,534	3,208,669	3,645,271	1,421,794	62,400,268
February	49,774,469	3,218,350	3,078,340	1,313,441	57,384,600
March	55,268,746	4,138,420	3,003,478	1,401,575	63,812,219
April	54,544,403	4,635,371	3,504,725	1,412,110	64,096,609
May	58,166,917	4,213,464	3,270,555	1,530,788	67,181,724
June	60,861,180	3,986,264	2,820,476	1,438,427	69,106,347
July	64,984,614	2,592,842	2,957,136	1,326,930	71,861,522
August	64,266,839	2,743,183	3,514,622	1,346,804	71,871,448
September	59,385,467	2,892,630	3,057,126	1,365,522	66,700,745
October	60,861,698	3,267,645	3,123,541	1,436,209	68,689,093
November	56,985,857	3,535,192	3,216,224	1,657,838	65,395,111
December*	57,000,000	3,400,000	3,200,000	1,700,000	65,300,000
Total	696,224,724	41,832,030	38,391,494	16,090,438	793,799,686

*December estimated.

Table 5.—Comparative Gasoline Consumption Figures, by States

State	Month of Oct., 1925 Gallons	Month of Nov., 1925 Gallons	Nov., 1924 Gallons	11 Months Ending With Nov., 1925 Gallons	11 Months Ending With Nov., 1924 Gallons	Percent. Increase '25 over '24
Alabama	9,997,468	9,447,124	8,325,545	97,426,082	78,800,828	23.6
Arizona	2,448,685	2,555,064	2,264,195	25,742,407	22,109,036	16.4
Arkansas	7,901,211	6,885,734	6,609,200	76,043,679	55,227,579	37.7
Colorado	8,108,911	8,142,731	7,672,161	92,999,001	84,901,834	9.4
Delaware	1,572,616	1,355,054	1,884,176	16,228,360	14,804,878	9.6
Florida	22,273,275	22,991,724	12,050,580	185,686,959	112,257,720	65.2
Georgia	13,637,902	14,913,554	11,517,705	133,729,890	111,856,896	19.6
Idaho	3,270,283	2,776,042	2,051,406	30,251,753	25,732,928	17.5
Indiana	27,536,499	24,686,476	21,439,438	255,554,291	228,584,886	8.4
Kansas	17,164,750	16,032,950	15,729,500	195,444,850	171,831,450	13.8
Kentucky	9,513,864	8,653,444	8,764,878	92,627,099	79,043,610	17.2
Louisiana	10,829,865	10,104,758	9,269,276	107,266,863	90,426,764	18.6
Maine	5,993,513	4,642,059	4,973,529	53,307,885	50,131,234	6.3
Minnesota	23,109,900	20,289,000	19,383,225	228,183,300	200,451,689	13.4
Mississippi	7,576,630	7,168,154	6,574,480	75,046,646	55,644,244	34.9
Missouri	28,270,100	22,157,050	25,081,500	237,708,450	203,467,200	16.8
Nevada	853,820	768,265	659,246	8,552,106	7,583,798	12.8
New Hampshire	3,489,714	2,866,588	2,564,875	33,482,616	29,079,002	15.1
New Mexico	1,986,157	1,804,353	1,835,989	19,304,638	17,024,820	13.4
North Carolina	16,749,079	16,665,850	14,545,336	167,431,704	139,318,199	20.2
North Dakota	6,326,603	4,618,506	4,648,125	61,866,264	48,747,978	27.1
Oklahoma	14,868,950	15,717,005	13,856,851	160,282,849	132,221,685	21.1
Oregon	9,443,333	7,958,227	6,695,527	94,102,756	80,692,691	16.3
South Carolina	8,120,796	7,788,191	6,225,133	77,693,903	60,907,965	27.5
South Dakota	6,847,006	5,802,470	5,525,228	68,840,898	59,542,763	15.5
Texas	38,740,257	38,174,437	36,567,174	416,688,153	340,020,069	22.5
Utah	3,077,274	2,479,209	2,506,179	28,986,521	26,324,244	10.1
Virginia	8,888,843	11,014,467	9,844,498	110,899,595	100,848,646	10.0
Washington	14,308,858	12,949,815	10,812,787	148,927,479	133,097,726	11.9
Wyoming	1,577,214	1,534,543	1,525,656	19,678,606	19,248,494	2.2
Total	334,483,359	312,942,844	281,403,398	3,319,980,603	2,779,930,856	19.4
Daily average	10,789,786	10,431,428	9,380,113	9,940,062	8,298,301	
Increase over previous year:						
Amount	.....	31,539,466	.....	540,049,747	.....	
Percentage	.....	11.2	.....	19.4	.....	
District of Columbia	4,024,527	3,837,171	3,197,146	40,963,489	.....	
Michigan	43,818,209	39,132,232	.....	.....	.....	
Nebraska	13,614,779	11,061,823	.....	.....	.....	
Ohio	51,111,383	46,271,857	.....	.....	.....	
Rhode Island	4,370,069	4,193,502	.....	.....	.....	
Wisconsin	26,010,776	20,305,788	.....	.....	.....	

In 30 states having a little more than one third the total gasoline consumptive capacity of the United States, gasoline tax and inspection figures show an increase of 19.4 per cent in consumption in the first 11 months of 1925 over the corresponding time of 1924. Florida has a percentage of increase of 65.2. Arkansas is second with 37.7 per cent increase and Mississippi third with 34.9 per cent. Concerning these preliminary gallonage figures the American Petroleum Institute, which collected them, says:

"Gasoline consumption in 30 states, as indicated by reports made by wholesalers and dealers in various states, under provisions of the gasoline tax laws or gasoline inspection laws, totaled for the eleven months ended with November, 1925, 3,319,980,603 gallons, compared with 2,779,930,856 gallons for the corresponding period of 1924 an increase of 540,049,747 gallons, or 19.4 per cent. Gasoline consumption in the 30 states for November, 1925, totaled 312,942,844 gallons, compared with 281,403,398 gallons in November, 1924, an increase of 31,539,446 gallons, or 11.2 per cent. November, 1925, consumption of 312,942,844 gallons, a daily average of 10,431,428 gallons, compared with 334,483,359 gallons, a daily average of 10,789,786 gallons in October, 1925, a decrease of 3.3 per cent.

"Figures are shown for the District of Columbia for November, 1924, for the month of October and November, 1925, and for the 11 months ended with November, 1925. The states of Michigan, Nebraska, Ohio, Rhode Island and Wisconsin are also shown for October and November, 1925. The figures giving the quantity of gasoline sold or offered for sale as reported under various laws follow: In some cases they are gross figures before deductions allowed for small quantities of gasoline reshipped or sold for other than taxable use, the tax upon which if paid, is subsequently refunded. All figures are subject to revision."

Form Developing Company

PITTSBURGH, Jan. 19—Headed by the Benedum-Trees interests, Pittsburgh capitalists are understood to be forming a company to be known as the Pittsburgh Oil Development Co. The company's plans are to carry on development on an extensive scale, with especial reference to wildcatting, both in South America and in the United States. It is reported that plans have been perfected to the extent of making a large number of locations for tests.

Details of the organization probably will be announced within a few days.

BONNERS FERRY, IDA.—The Texas Co. has bought a site here and will erect a $7,000 brick and concrete service station on it.

Testing Legality of Standard's Q. D. A In Wisconsin Tribunal

By Ward K. Halbert
N. P. N. Staff Writer

MADISON, WIS, Jan. 18.

STANDARD OIL CO. of Indiana's quantity discount agreement is about to be tested out in court and its legal fairness determined in the light of the anti-discrimination laws of the state of Wisconsin.

This contemplated legal action on the part of the state came to light here recently when it became known in the office of the department of markets that a hearing had been arranged for the first week in February. This hearing before Edward Nordman, commissioner of markets, will be the first of a series of three or four hearings all of which will take place in February but each at a different locality.

Some Independent oil jobber, whose name is withheld by the department of markets, already has brought complaint against the Standard Oil Co., charging it with unfair competition through the operation of its Q. D. A. In a very few words, the charge against the Standard is that it takes business away from smaller companies with the Q. D. A., purely by virtue of its (Standard's) bigness, not with superior merchandise, service or salesmanship.

Can't Hold Big Accounts

This same contention has been made by Independent jobbers all over Standard Oil Co. of Indiana territory. Probably 90 per cent of all the jobbers in the 11 states have tried to meet Standard's graduated quantity price scale, making corresponding discounts or refunds to large consumers, holding the business in localities where they could. In every case the Independents have failed, however, to hold their share of big national accounts because they were unable to give service outside their limited marketing territories. This loss of gallonage has been considerable with some Independents while with others it is a trivial item, depending on locality and the nature of the trade.

Since the Q. D. A. became effective on July 1, 1925, there have been many competitors of the Standard Oil Co. to call it unethical and unfair. A few jobbers have retaliated mildly by withdrawing their business from firms whose patronage they lost to the Standard. Trade associations have criticised the Q. D. A. and some organized effort has been attempted to cope with it, but with indifferent success, so far. The Missouri Oil Men's Association has been conspicuous in this fight, regularly listing signers of Standard's Q. D. A. The Minnesota Petroleum Association too has planned concerted opposition to it.

With all the objection that has been raised to the operation of the Q. D. A., nobody has attacked its legality until now. Whether it is ethical for a company to exercise an advantage it has in being big, is a matter of opinion of course. Even the attaches of the Wisconsin department of markets are not quick to assert that the principle is unfair. Some of them at least acknowledge that the quantity discount principle is right except in certain of its aspects. The objectionable aspect is the "inter city feature." They say the price of gasoline in Waukesha should have no relation to the quantity sold in Milwaukee, for illustration.

The Independents contend that the Q. D. A. stifles competition, in that it does not give every man in his own trade territory a "fair shot" at the business that develops there. And that may be the argument that will be advanced by the department of markets. At any rate it will be one of the state's arguments, in the event the case actually gets as far as a regular court. The departmental investigation by public hearing is assured, but the result of these hearings will determine whether the state will try actually to knock out the Standard's selling proposition in court.

If the Independent oil men in some of the other states had had the instrument that is available to the Wisconsin group, some one might have started a legal fight on the Q. D. A. before this, but no other state has an anti-discrimination law like the one in Wisconsin. Here the anti-discrimination law created, and continues to supply authority to, a department of markets. This department may make rulings that have to do with business ethics and these rulings have the force of laws and punshments are provided for their violation.

The Law Has Teeth

A great many people think the Wisconsin law might be quite a dangerous thing for business interests in the state if it were in bad hands. Fortunately the department of markets has never shown a disposition to persecute any industry. The department's contact with the petroleum industry is maintained by Don Montgomery who has the confidence and co-operation of the oil men, with only a few exceptions. It was Mr. Montgomery who had to direct the workings of the famous "General Order 23" which went into effect in Wisconsin last year. And, thus far, he has handled the work incidental to this latter investigation.

General Order 23 is the ruling which makes secret prices illegal in Wisconsin. It went into effect about a year ago and under its provisions no gasoline price is illegal except a secret price, but secret prices are illegal no matter how high, or how low, or how uniform they may be. This ruling has the complete support of all the leading Independent dealers in the state.

If the procedure against the Q. D. A. actually develops into a legal battle it will have a departmental order, similar to "G. O. 23" as its turning point. The development of the case may be expected in about the following manner:

In the regular order of events a complaint is filed by some gasoline dealer with the Wisconsin department of markets. To determine a few facts about the merits of the complaint and to learn if a thorough investigation is justified, a superficial investigation always is held. If ordinary inquiry or brief investigation indicates that a thorough probe should be conducted the commissioner of markets names a time and place for a hearing and witnesses are summoned. (That is just where matters stand now in the procedure against the Q. D. A.)

How to Invoke Court

Although Mr. Nordman has not named the exact date, the first hearing will be held in Madison during the first week in February. Standard Oil Co., representatives and Independent oil men as well as other persons will be hailed before the commissioner and questioned. When this is done, if then it appears to the commissioner that the operation of the Q. D. A. is unfair, he will issue an order prohibiting its operation.

If the departmental order is agreeable to everybody concerned it will operate until it is contested in court. Most likely the order will stipulate in substance that gasoline prices at one place in Wisconsin shall not be based on quantity sold somewhere else. If the Standard Oil Co. does not object to the order it will operate and that will be the end of the matter, but of course the company will be at liberty to enjoin the enforcement of the order. Standard officials might seek an injunction to keep the state from enforcing the order and thus the merits of the case would be brought up and reviewed in the courts of the land.

To what extent the Standard Oil Co. may see fit to defend its Q. D. A. in Wisconsin is yet to be determined. Last year the total gallonage in Wisconsin was 250 millions of gallons of gasoline. The Standard's share was roughly 35 percent or about 87½ millions of gallons. According to estimates made to the department of markets, 37 per cent of all the Standard's business in the state is done on Q. D. A. but only a little of that is inter-city, about 1¼ per cent of

their total gallonage (something like a million gallons.)

A million gallons of gasoline, more or less, is what the contest will be about. The complaining Independent thinks so much business has been diverted from small jobbers to the Standard Oil Co. These figures may be about correct, although there is quite a little to be said on both sides. What has actually happened is not so much the point as the right and wrong of the thing. "Did the Standard divert the gallonage by fair means?" is the question and, again, there is plenty of room for argument. It probably will be one of the most carefully watched cases since the decision of White Eagle Oil & Refining Co., vs. Gov. Carl Gunderson of the State of South Dakota.

The interest may be national or nearly so. A great many states in the middle west have anti-discrimination laws. Illinois, and probably some others are thinking about having one. This case involves a new problem, stands without legal precedent as far as Mr. Montgomery knows, and opens up a thoroughly unexplored region in business law.

Every day the importance of the case increases, not simply because it becomes more interesting from a legal standpoint as it develops, but because the amount of gallonage involved is growing daily. The list of big national business institutions now buying all their gasoline from the Standard Oil Co. on Q. D. A. includes Swift & Co., John Deere Plow Co., United Tobacco Co., Kirk Soap Co., International Harvester Co., Grand Union Tea Co., American Railway Express Co., Long Bell Lumber Co., Morton Salt Co., and Armour & Co.

Senate Finance Committee Inserts Substitute Discovery Clause

Staff Special

WASHINGTON, Jan. 18

A DISCOVERY allowance for oil and gas wells, written by Senator Curtis of Kansas, has been voted into the pending tax reduction bill in lieu of the provision passed by the House of Representatives by the Senate finance committee. It is to be inserted in the place now held, on pages 20 and 21 of the bill as introduced in the House, by the treasury regulations, among which is the one providing that a well shall prove 160 acres. The new provision is as follows:

> "In the case of oil and gas wells the allowance for depletion from and after December 31, 1924, shall be 25 per cent of the gross income from the property during the taxable year; provided, such allowance shall not exceed 50 per cent of the net income of the tax-payer (computed without allowance for depletion) from the property except that in no case shall the depletion allowance be less than it would be if computed without reference to this paragraph."

The new provision is a compromise between the advocacy of a 35 per cent depletion allowance by the representatives of the oil and gas industry who have been working with the members of the committee on that subject, and the senators who insisted there should be no greater allowance than twenty per cent. Among the advocates of the allowance there was agreement that the House provision would not do.

Finance Committee Agrees

In substance, as generally known, it was the rule followed by the treasury in figuring depletion, under the provision of the statute requiring the treasury to adopt rules for administering the present law. Inasmuch as the Internal Revenue Office, in the Couzens report, was mercilessly arraigned for what had been done under the law as it stands, members of the finance committee found no trouble in reaching the conclusion that it would not to to enact into statute the regulations that made the criticism possible.

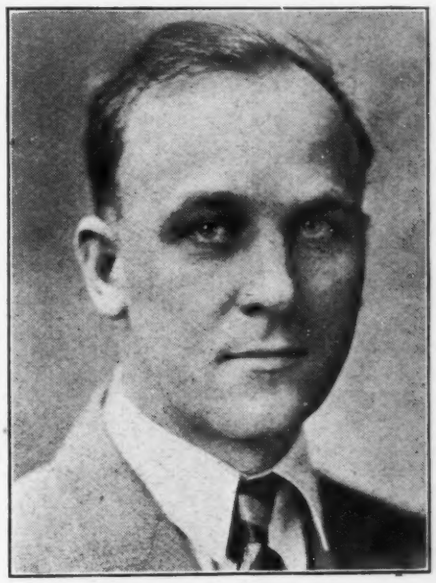
Democratic senators agreed with their Republican colleagues upon the provision as drafted by Senator Curtis. Therefore adoption by the Senate is clearly indicated. What will happen to the Curtis amendment when it reaches the House of Representatives is still a question for the relatively distant future.

Percentage was advocated on the ground that it would simplify the work of the treasury in the imposition of the tax and do away with the technicalities of engineering efforts to place a valuation on a new well, as well as the acreage unit.

Couzens Will Fight

Senator Couzens of Michigan has indicated that he will fight any depletion allowance, as might be inferred from the partial report he has made upon the investigation of the income tax unit of the Internal Revenue Office. He does not subscribe to the theory that an allowance is necessary to encourage wildcat operations. He thinks the allegation of the employes of his committee, one of whom is a former employe of the income tax unit, that only 35 out of more than 13,000 discovery well allowances went to what he calls wildcatters proves that the depletion allowance is a delusion and a snare for real wildcatters and merely for the benefit of big operators. How much of a following he will have when the voting comes it is impossible to estimate at this time.

New England Oil Men Elect Officers



F. E. Bergfors
President, New England Association

BOSTON, Jan. 18.—Officers and directors for 1926 were elected at the regular monthly meeting of the Independent Oil Men's Association of New England. The meeting was held in the Boston Chamber of Commerce rooms, Jan. 13.

F. E. Bergfors, of the Quincy Oil Co., Quincy, Mass., was elected president; F. C. Bellis, of the F. C. Bellis Oil Co., Worcester, Mass., vice president; I. H. Farrar, Berkshire Oil Co., Worcester, Mass., secretary; C. Charles Houghton, of the Houghton Oil Co., Somersville, Mass., treasurer.

Two directors were chosen for a three-year term. These were W. H. Goodrich, of W. H. Goodrich & Co., Inc., New Haven, Conn., and A. R. Tattersall of the F. C. Bellis Co., Worcester.

Two directors will serve for two years each. These are A. A. Harrison, Borden Remington Co., Fall River, Mass., and L. D. Pierce, Pennsylvania Petroleum Products Co., Providence, R. I.

J. V. Porteous, Valley Oil Co., Middleton, Conn., was elected a director to serve one year.

The meeting was addressed by W. H. O'Brien, chief of the telephone and telegraph division, Massachusetts department of public utilities. He spoke on telephone service, which he characterized as the most vital artery of the business and social structure.

Discussion was held by the members on the gasoline tax, as the subject is again before the state legislature. As registration fees for automobiles have been increased, the oil men decided to refer the question of opposing or favoring the one-cent gasoline tax to the association directors. Their decision will be made known at the next monthly meeting, Feb. 10, in Boston.

U. S. Investigators Trace No Lead Poisoning to Ethyl Gasoline

By A. E. Heiss
N. P. N. Staff Writer

WASHINGTON, Dec. 18

LEADED gasoline is not a danger to drivers using it, no detectable symptoms of lead poisoning have been found among employes of garages engaged in repairing cars, or employes of service stations handling ethyl gasoline. In Ohio where ethyl gasoline has been used since 1920 no definite cases have been discovered of recognizable lead poisoning or other disease resulting from its use.

That is the substance of conclusions reported to Surgeon General H. S. Cumming of the United States Public Health Service by the committee appointed last May, as a result of the conference on ethyl gasoline following the serious lead poisonings at Deep Water, N. J., where tetraethyl lead was being made and at a station at which ethyl fluid was being mixed with gasoline. The committee is composed of W. H. Howell, A. J. Chesley, David L. Edsall, Reid Hunt, W. S. Leathers, Julius Stieglitz, and C. E. A. Winslow.

Inquire Into Hazard

The committee's investigation was primarily conducted to determine what hazard, if any, leaded gasoline had for the public health, there being no dispute about its danger to men engaged in any manufacturing process employing lead in any form. The inquiry was conducted at Dayton and Cincinnati although the committee looked over the plant at Deep Water. The committee knew that while the sale of leaded gasoline had been stopped voluntarily, pending the inquiry, there was a quantity of it in the hands of consumers in Dayton and Cincinnati and that conditions that were common before the sale was stopped elsewhere, would be found in the Dayton municipal garage and at a garage in Cincinnati.

Doctors, chemists and other technical folk that would be called into action by such an inquiry examined 252 individuals divided into five groups. The first group was composed of employes of the city of Dayton who drove cars not using leaded gas; the second, also employes of Dayton who used cars in which ethyl gas was burned; third, employes in the Dayton city garage and employes in a similar garage in Cincinnati, or as pump operators at service stations or on trucks delivering gasoline in Dayton, in none of which employments did the men come into contact with leaded gas; fourth a group of 57 men employed the same way as the third group except that they handled leaded gas or were around it while burning; and fifth, a group of 61 men employed in two industrial plants in which there was serious exposure to lead dust and in which many cases of lead poisoning had been known.

Run Down Rumors

The committee also ran down rumors of lead poisoning in the territory in which leaded gasoline was used but found nothing.

Examination of feces and blood smears resulted, the committee said, in some positive results, but a special test of extensor muscles of the forearm devised for the purpose of this test yielded negative results. Definite clinical symptoms of lead poisoning were revealed, the committee said, by the tests of the workers in the two plants where the hazard from lead dust was known, although the period of exposure covered by the tests on that group of men was much shorter than in the cases of the men in the other groups.

The amount of lead found in the men composing the two first mentioned groups, one exposed to leaded gasoline and the other not so exposed, the committee said, was practically the same. The committee said the fact that the men in the first group showed as much lead as those in the second, showed they were exposed to lead from some undetermined source. Yet it said the men in the second group showed no positive indication of increased absorption of lead. Men in the laboratory showed lead in concentrations not differing materially from those in the first mentioned groups, although they had not been exposed to any known lead hazard.

General Conclusions

On the basis of the tests, covering men who had been exposed on an average of two years to leaded gasoline fumes, the committee felt the following general conclusions and comments were justified:

"1. Drivers of cars using ethyl gasoline as a fuel and in which the concentration of tetraethyl lead was not greater than 1 part to 1500 parts by volume of gasoline, showed no definite signs of lead absorption after exposures approximating two years.

"2. Employes of garages engaged in the handling and repairing of automobiles and employes of automobile service stations may show evidence of lead absorption and storage, as indicated by the lead content of the feces and the appearance of stippled cells in the blood. In garages and stations in which ethyl gasoline was used, the amount of apparent absorption and storage was somewhat increased, but the effect was slight in comparison with that shown by workers in other industries where there was a severe lead hazard and for the periods of exposures studied was not sufficient to produce detectable symptoms of lead poisoning.

"3. In the regions in which ethyl gasoline has been used to the greatest extent as a motor fuel for a period of between two and three years, no definite cases have been discovered of recognizable lead poisoning or other disease resulting from the use of ethyl gasoline.

No Prohibitory Grounds

"In view of these conclusions your committee begs to report that in their opinion there are at present no good grounds for prohibiting the use of ethyl gasoline of the composition specified, as a motor fuel, provided that its distribution and use are controlled by proper regulations in regard to the manufacture, distribution and use of tetraethyl lead, ethyl fluid, and ethyl gasoline for adoption and enforcement by the several states belongs properly to the office of the surgeon general of the Public Health Service.

"In conclusion we beg to say that we are conscious of the fact that the conclusions to which we have come in this report, although based upon most careful and conscientious investigations, are subject to the criticism that they have been derived from the study of a relatively small number of individuals who were exposed to the effects of ethyl gasoline for a period of time comparatively brief when we consider the possibilities in connection with lead poisoning. A more extensive study was not possible on account of the limited time.

"It remains possible, that if the use of leaded gasolines becomes widespread, conditions may arise very different from those studied by us which would render its use more of a hazard than would appear to be the case from this investigation. Longer experience may show that even such slight storage of lead as was observed in these studies may lead eventually in susceptible individuals to recognizable lead poisoning or to chronic degenerative diseases of less obvious character. In view of such possibilities the committee feels that the investigation begun under their direction must not be allowed to lapse."

SPRINGFIELD, ILL.—A meeting of all salesmen of the Standard Oil Co. of Indiana was held at the Jefferson Hotel, at Peoria, on Jan. 2. J. R. Coleman, manager of the Peoria branch, and A. R. Moulsby, assistant manager, were in charge of the meeting.

Compilation Of Mid-Continent Refinery Operations

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National Petroleum News

Kerosene and Distillate Stocks Continue to Diminish

Special Wire Service

TULSA, Jan. 18

THE steady reduction of kerosene and stove distillate stocks at Mid-Continent refineries which has been in progress for the last month and a half, continued during the second week of January. Reports from 124 refineries for the week ended Jan. 15 showed a reduction of 1,000,000 gallons in kerosene stocks and a reduction of 1,400,000 gallons in stove distillate stocks.

Gas oil stocks increased for the first time in several weeks but at all reporting plants the increase was only 300,000 gallons. Shipments of fuel oil continued to be below the level of production and stocks increased 2,500,000 gallons to 105,937,586 gallons.

Gasoline shipments increased 5,000,000 gallons as compared with the first week of the month rising to 28,909,502 gallons, the increases being noted by all groups but being largest in Oklahoma and Kansas. Production was likewise increased slightly due to an increase in crude runs, the output for the week being 30,508,237 gallons. Stocks were thus increased 1,600,000 gallons to 72,532,308 gallons. At the rate of shipment maintained during the week gasoline stocks represented only 18 days' supply. Stocks of gasoline and gas oil for Jan. 8 have been revised this week because of corrected report.

Summary for Month

Production and shipments, all reporting refineries, for four weeks ended Jan. 15. Change in stocks figured from Dec. 18.

	Gallons
Gasoline	
Production	118,692,642
Shipments	102,904,283
Net change in stocks	+15,788,359
Ratio sales to production	86.7%
Kerosene	
Production	21,164,716
Shipments	22,671,967
Net change in stocks	—1,507,251
Ratio sales to production	107.1%
Stove Distillate	
Production	6,643,818
Shipments	11,706,434
Net change in stocks	—5,062,616
Ratio sales to production	176.2%
Gas Oil	
Production	22,361,087
Shipments	23,191,667
Net change in stocks	—830,580
Ratio sales to production	103.7%
Fuel Oil	
Production	111,283,945
Shipments	105,387,978
Net change in stocks	+5,895,967
Ratio sales to production	94.7%

Mid-Continent Refinery Operations Week Ended Jan. 15 (By Fast Wire)

	Kansas	%Change Previous Week	Oklahoma	%Change Previous Week	No. & Cent. Texas	%Change Previous Week	No. La.-Ark.	%Change Previous Week	Total	%Change Previous Week	Totals Week Ended Dec. 18
Plants Reporting	23		46		41		14		124		124
Da. Cap. (Bbls.)	98,200		165,900		144,300		51,700		460,100		460,100
Da. Av. Crude Run	46,367	— 9.6	105,515	+ 5.7	62,202	+10.6	35,914	— 0.1	249,998	+ 2.7	262,100
Da. Av. Other Oils	5,362	+164.8	393	—88.6	1,214	—47.7	653	—40.0	7,622	—14.3	7,472
GASOLINE—Gallons											
Stocks Jan. 8	12,073,754		*39,326,870		*15,988,725		3,544,224	*	70,933,573		52,179,075
Prod. 1-8 to 1-15	7,502,258	— 0.9	13,907,280	+ 6.4	6,609,422	+10.1	2,489,277	— 0.3	30,508,237	+ 4.7	31,279,547
Ship. 1-8 to 1-15	7,846,049	+29.3	12,303,515	+26.9	6,255,444	+ 7.4	2,504,494	+ 8.9	28,909,502	+21.0	27,326,673
Stocks Jan. 15	11,729,963	— 2.8	40,930,635	+ 4.1	16,342,703	+ 2.2	3,529,007	— 0.4	72,532,308	+ 2.3	56,743,949
Ratio Sales to Prod.	104.6%		88.5%		94.6%		100.6%		94.8%		87.4%
KEROSENE—Gallons											
Stocks Jan. 8	2,911,368		4,746,431		1,226,637		296,514		9,180,950		9,504,269
Prod. 1-8 to 1-15	1,103,739	—15.9	2,456,268	+ 3.4	1,158,677	+ 0.8	362,871	+13.4	5,081,555	— 1.5	5,013,027
Ship. 1-8 to 1-15	1,918,664	—19.6	2,583,955	— 0.3	1,170,544	— 8.0	346,925	+27.6	6,020,088	— 7.7	4,767,628
Stocks Jan. 15	2,096,443	—28.0	4,618,744	— 2.7	1,214,770	— 1.0	312,460	+ 5.4	8,242,417	—10.2	9,749,668
Ratio Sales to Prod.	173.8%		105.2%		101.0%		95.6%		118.5%		95.1%
STOVE DISTILLATE—Gallons											
Stocks Jan. 8	3,242,614		9,808,690		1,222,664		33,768		13,479,736		18,212,536
Prod. 1-8 to 1-15	530,561	—15.9	698,288	—10.9	220,166	—33.1	27,006	+ 2.9	1,476,021	—16.5	1,545,154
Ship. 1-8 to 1-15	1,013,302	+ 6.4	1,549,057	+ 9.2	253,432	—70.4	23,940	— 9.4	2,839,731	—11.9	2,579,048
Stocks Jan. 15	2,759,873	—14.9	8,229,921	— 9.4	1,089,398	— 3.0	36,834	+ 9.1	12,116,026	—10.1	17,178,642
Ratio Sales to Prod.	191.0%		221.8%		115.1%		88.6%		192.4%		166.9%
GAS OIL—Gallons											
Stocks Jan. 8	4,178,728		29,734,719		*15,014,707		6,432,364	*	55,360,518		56,823,135
Prod. 1-8 to 1-15	1,426,225	+10.5	2,985,113	+24.1	219,316	—13.8	1,262,632	—10.2	5,893,286	+10.0	5,989,742
Ship. 1-8 to 1-15	1,063,876	— 5.2	845,142	—57.8	2,325,894	+887.1	1,393,481	—31.8	5,628,393	—12.3	6,356,896
Stocks Jan. 15	4,541,077	+ 8.7	31,874,690	+ 7.2	12,908,129	—14.0	6,301,515	— 2.0	55,625,411	+ 0.5	56,455,991
Ratio Sales to Prod.	74.6%		28.3%		160.5%		110.4%		95.5%		106.2%
FUEL OIL—Gallons											
Stocks Jan. 8	12,026,582		54,112,705		22,277,141		15,082,123		103,498,551		98,604,298
Prod. 1-8 to 1-15	4,373,713	—11.2	8,718,815	+ 3.4	9,143,943	+15.8	6,100,638	+ 0.4	28,337,109	+ 3.7	29,294,159
Ship. 1-8 to 1-15	4,722,721	+12.3	8,341,442	— 7.4	7,189,030	—17.2	5,644,881	— 0.7	25,898,074	— 6.1	27,856,838
Stocks Jan. 15	11,677,574	— 2.9	54,490,078	+ 0.7	24,232,054	+ 8.8	15,537,880	+ 3.0	105,937,586	+ 2.4	100,041,619
Ratio Sales to Prod.	108.0%		95.7%		78.6%		92.5%		91.4%		95.1%

*Revised.

Crude Production by Districts

Daily average gross crude output of United States, by fields, for week ending with dates given below, as compiled by American Petroleum Institute

National Petroleum News

OKLAHOMA

	Jan. 16	Jan. 9
North Braman	2,200	2,300
South Braman	4,500	4,300
Blackwell	2,950	2,850
Hubbard	1,800	1,800
Thomas	14,550	14,750
Tonkawa	45,550	45,650
Garber	25,450	28,950
Burbank	44,500	44,600
Osage, outside Burbank	32,950	33,000
Watchorn	1,850	1,800
Cushing	22,700	22,650
Yale, Jennings	11,800	11,850
Davenport	21,450	20,350
Bristow-Slick	31,800	31,750
North Okmulgee	18,800	18,550
Lyons-Deaner	4,400	4,400
Stroud	2,850	2,950
Cromwell	20,550	20,250
Papoose	12,850	13,250
Wewoka	11,700	11,800
Duncan district	7,600	7,600
Graham	9,100	9,150
Fox	4,100	4,100
Healdton	15,050	15,050
Hewitt	13,200	13,250
Others	63,500	62,800
Total Oklahoma	447,750	449,750
Decrease		2,000

* * *

KANSAS

	Jan. 16	Jan. 9
Florence-Covert	1,900	1,900
Peabody-Elbing	4,850	4,800
Eldorado-Towanda	14,200	14,150
Augusta-Fox Bush	5,100	5,100
Rainbow Bend	5,950	5,550
Russell	5,650	5,700
Others	62,750	62,750
Total Kansas	100,400	99,950
Increase		450

NORTH LOUISIANA

	Jan. 16	Jan. 9
Homer	5,750	5,850
Haynesville	10,400	11,400
Caddo, light	9,450	8,800
Caddo, heavy	2,350	2,500
De Soto, Red River	3,850	3,800
Elm Grove	600	650
Bellevue	2,250	2,350
Cotton Valley	8,300	8,400
Others	550	450
Total N. Louisiana	43,500	44,200
Decrease		700

* * *

ARKANSAS

El Dorado	7,450	7,800
Smackover, light	19,200	19,400
Smackover, heavy	154,300	153,700
Stephens	1,700	1,700
Nevada	1,600	1,550
Total Arkansas	184,250	184,150
Increase		100

* * *

SOUTHWEST TEXAS

Luling	20,500	21,400
Mirando	6,200	6,200
Somerset	2,200	2,200
Lytton Springs	8,100	8,150
Piedras Pintas	900	1,700
Others	600	650
Total S'west Texas	38,500	40,300
Decrease		1,800

* * *

GULF COAST

Goose Creek	8,650	8,450
Hull	15,250	14,200
Saratoga	1,300	900
Blue Ridge	800	800
Damon Mound	1,000	1,050
Batson	1,000	1,000
West Columbia	8,800	9,000
Humble	4,750	4,800
Pierce Junction	1,450	1,400
Sour Lake	3,750	3,800
Spindletop	2,800	1,150
Orange county	14,400	16,400
Edgerly	650	700
Evangeline	1,000	1,000
Vinton	6,700	6,700
Lockport	2,350	2,750
South Liberty	8,000	9,200
Big Creek	950	1,150
Boling	3,950	2,400
Others	1,200	1,250
Total Gulf Coast	88,750	88,100
Increase		650

* * *

NORTH TEXAS

Burkburnett	12,800	12,700
Electra	16,950	17,000
Iowa Park and K-M-A	5,500	5,500
Wilbarger	11,700	11,900
Panhandle	1,500	2,900
Petrolia	400	400
Archer county	30,200	30,300
Others	900	900
Total North Texas	79,950	81,600
Decrease		1,650

* * *

EAST CENTRAL TEXAS

Mexia	13,950	14,050
Currie	1,100	1,100
Richland	2,550	2,500
Corsicana-Powell	33,200	33,650
Wortham	12,900	12,700
Total E. C. Texas	63,700	64,000
Decrease		300

* * *

WEST CENTRAL TEXAS

Stephens county	13,050	13,100
Eastland county	6,200	6,200
Desdemona	2,050	2,050
Young county	9,250	9,200
Palo Pinto county	400	450
Callahan county	4,950	4,950
Shackelford county	2,350	2,400
Reagan county	33,250	32,450
Others	5,000	5,000
Total W. C. Texas	76,500	75,800
Increase		700

* * *

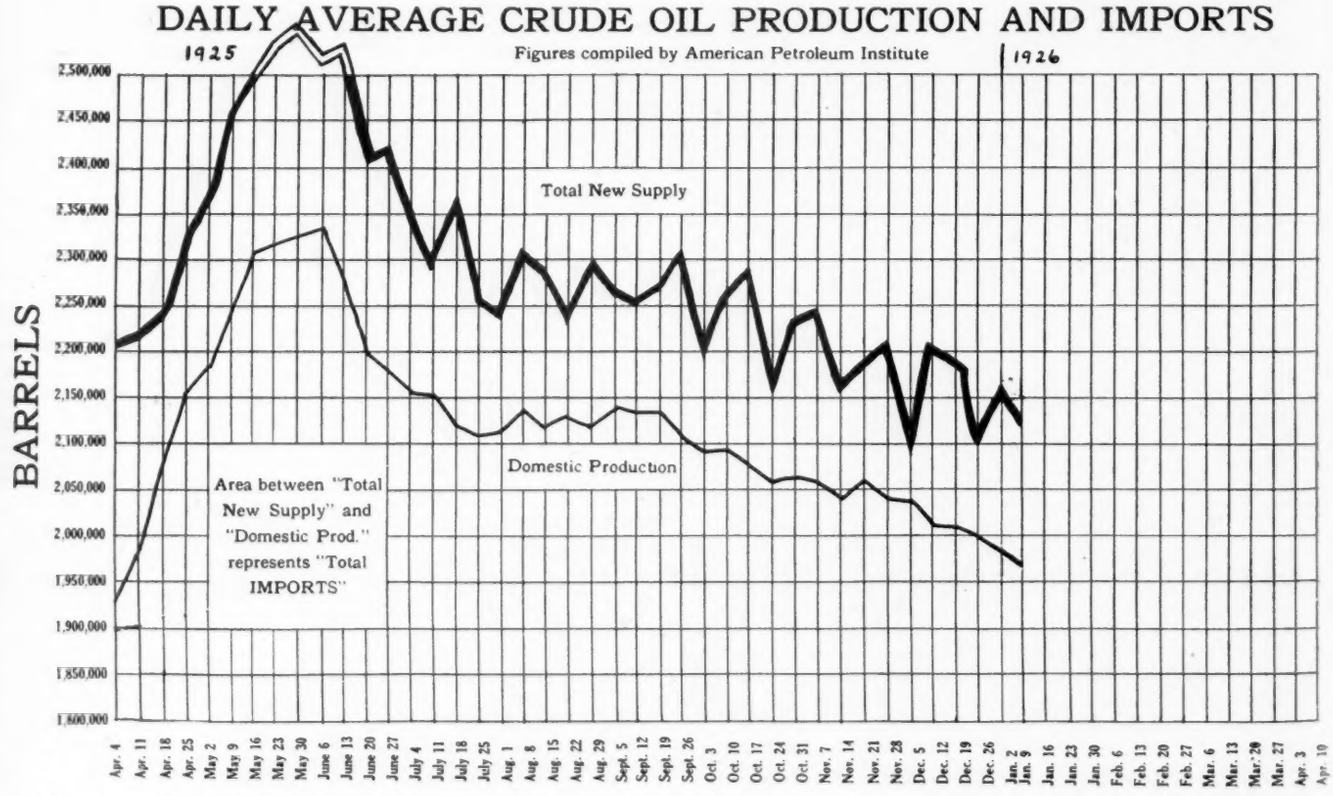
ROCKY MOUNTAIN

WYOMING

Salt Creek	61,450	62,450
Grass Creek	2,750	2,700

(Continued on page 44)

DAILY AVERAGE CRUDE OIL PRODUCTION AND IMPORTS

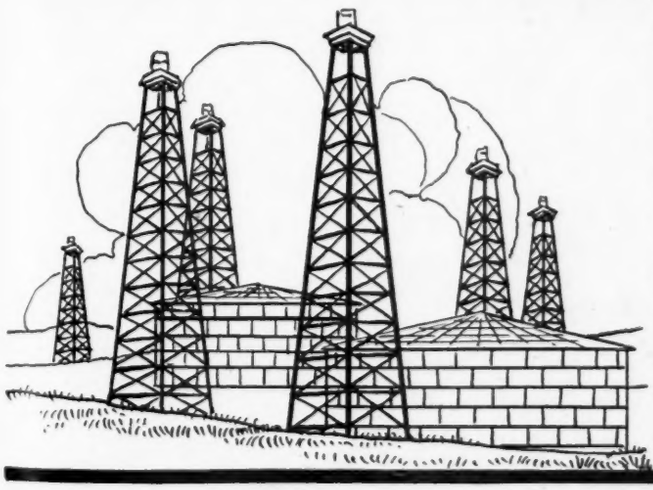


This chart is based on official complete figures of A. P. I. and is a week older than the production estimates given in regular tabular form above.

"OILWELL" was the originator of the *make-and-break* type of rotary—

And in spite of the many "just as good" rotaries of the same type now on the market, *there are more "OILWELL" make-and-break Rotaries in use today than of all other makes combined.*

This is surely a tribute to the superiority of "OILWELL" Rotaries—"The Best There Is," as so fittingly written on the grief stem by the crew shown above.



With an "OILWELL" *make-and-break* Rotary, drill pipe, tool joints, and casing can be screwed up with tighter joints than by any other method, and with no damage to the threads, as well as unscrewed when necessary. The Rotary does it all.

Write for our Bulletin, "Imperial or Junior" or get a copy at any of our 100 Branches.

OIL WELL SUPPLY CO.

NEW YORK—LOS ANGELES—PITTSBURGH, U.S.A.—SAN FRANCISCO—TAMPICO—LONDON

WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

(Continued from page 42)

Elk Basin	700	650
Big Muddy	3,350	3,250
Lost Soldier	4,600	4,050
Rock River	2,900	2,950
Teapot Dome	1,700	1,900
Others	4,500	4,500
Total Wyoming	81,950	82,450
Decrease		500
MONTANA		
Cat Creek	3,200	3,200
Sunburst	8,850	10,100
Total Montana	12,050	13,300
Decrease		1,250
COLORADO		
Moffat (Craig)	3,150	3,150
Fort Collins	1,950	1,900
Florence	400	400
Others	500	450
Total Colorado	6,000	5,900
Increase		100
NEW MEXICO		
Artesia	3,500	3,500
Hogback	500	500
Rattlesnake	300	300
Total New Mexico	4,300	4,300
Total Rocky Mountain	104,300	105,950
Decrease		1,650
CALIFORNIA	**Jan. 16**	**Jan. 9**
Santa Fe Springs	51,000	51,500
Long Beach	112,000	112,500
Huntington Beach	46,000	46,000
Torrance	31,000	32,000
Dominguez	23,500	23,500
Rosecrans	23,000	23,000
Inglewood	59,000	62,500
Midway-Sunset	92,000	93,000
Others	182,000	185,000
Total California	619,500	629,000
Decrease		9,500
EASTERN		
(Including Ill., Ind., Ky., Ohio, W. Va., Pa. and N. Y.	100,500	101,100
Decrease		600
PRODUCTION SUMMARY		
Production east of Rockies	1,328,100	1,334,800
Decrease		6,700
Total Production in U. S.	1,947,600	1,963,800
Decrease		16,200

Dillon, Reid Buying Amerada Central

TULSA, Jan. 18.—Announcement is expected in a short time of details of the plan under which Dillon, Reid & Co., New York bankers, are buying control of the Amerada Petroleum Corp., and which will result in the company becoming American-controlled. John M. Lovejoy, division manager of the Amerada, in charge of Mid-Continent operations, left today for New York to take part in the negotiations. It is said that the company under the new ownership will be operated by E. De Golyer, now vice-president and general manager, and Mr. Lovejoy.

The Amerada was formed by Lord Cowdray in 1920 to engage in oil production in the Mid-Continent field, and has been largely owned by British stockholders. It is reported that the New York bankers will buy about one-half of the outstanding stock, which will then be distributed to the public, placing control in the hands of Americans. Details of the transaction, which probably involves 10 million dollars, and of the company's new financing, are not available in Tulsa at this time.

Paul N. Boggs, assistant general manager, Union Oil Co. of California. Mr. Boggs is chairman of the executive committee for entertainment of A. P. I. Convention, Los Angeles

Oil Board's Hearing Set for Feb. 10

WASHINGTON, Jan. 18.—The public hearing promised by the Federal Oil Conservation Board on the representations made by the oil men who answered the Board's questions will be held on Feb. 10 and 11. Announcement to that effect was made by Secretary Work on January 15.

A controlled program is to be followed. Two days only can be devoted to the subject. The secretary has made up a list of the men from whom he desires to obtain ideas. Those desiring to speak at length, or to present statistical data are invited to put their thoughts upon paper.

The secretary, in announcing his selection of those days clearly indicated that he expected the men in his list to be considered as formally expected to talk. After they have talked, the announcement said an opportunity would be afforded for a limited discussion "outside of the arranged program."

Amos L. Beaty, president, The Texas Co.; W. N. Davis, president, Mid-Continent Oil & Gas Association; George S. Davison, president, Gulf Refining Co.; Henry L. Doherty; C. F. Kettering, president, General Motors Research Corp.; K. R. Kingsbury, president, Standard Oil Co. of California; J. O. Lewis, consulting petroleum engineer; L. V. Nicholas, president, National Petroleum Marketers Association; Thomas A. O'Donnell, California Petroleum Co.; J. Edgar Pew, president, American Petroleum Institute; Mark L. Requa; John D. Rockefeller, jr.; W. C. Teagle, Standard Oil Co. of New Jersey; Prof. Lester C. Uren, University of California.

"Others who may wish to appear at the public hearings are invited to communicate immediately with the Chairman, stating the topic it is desired to discuss, in order that the Board's program may be formulated with some degree of continuity and the subjects grouped for the guidance of the Board and those attending the hearings," says the announcement.

"The Board has an open mind. The industry has willingly and fully responded to the Government's request for specific data relating to petroleum conditions. The views expressed are divergent, the statements supplied conflict in some instances, and the conclusions arrived at represent apparently two distinct schools of thought. The Board, however, is not inclined at this time to accept any of the expressions as conclusive, but rather is hopeful for further elucidation from those who may be willing to amplify or submit additional basic facts."

The hearings will be held in the office of the Secretary of the Interior, beginning at 11 a. m. and will be open to the public.

No Merger for T. P.

LOS ANGELES, Jan. 18.—Edgar J. Marston, vice president and treasurer of the Texas Pacific Coal & Oil Co., today officially denied that his company will figure in any of the recently rumored consolidations. He said the stockholders of his company were considered to have their best interests served outside of consolidations.

Truex New President of Tulsa Society

Staff Special

TULSA, Jan. 18.—Arthur F. Truex, of the Twin State Oil Co., has been elected president of the Tulsa Geological Society for 1926, succeeding Walter B. Wilson of the Gypsy Oil Co. Frank A. Herald, consulting geologist and member of the firm of Herald Bros., is the new vice president. Miss Dollie Radler, of the Amerada Petroleum Corp., was re-elected secretary and treasurer.

The council, in addition to the officers named above, is composed of W. B. Wilson, A. L. Beekly, chief geologist, Mid-Continent Petroleum Corp., Harry H. Nowlan, consulting geologist, and Frank R. Clark, Mid-Kansas Oil & Gas Co.

The program committee, whose duty it will be to outline meetings and subjects for discussion for the ensuing year, is composed of Frank Herald, A. W. Duston, chief geologist, Independent Oil & Gas Co., and A. A. Langworthy, chief geologist, Pure Oil Co.

Sixth Annual Meeting, American Petroleum Institute, Los Angeles, Jan. 19, 20 and 21

Industry Saving Millions in Costs Through Standardization

By Paul Wagner
N. P. N. Staff Writer

LOS ANGELES, Jan. 19

HUNDREDS of thousands of dollars yearly, millions eventually, will be saved to the petroleum industry by agreed practice in standardization of oil field drilling and storage equipment. The industry's program, which has been virtually completed, represents today a monumental accomplishment attained through the medium of the American Petroleum Institute.

The co-operation of the petroleum industry generally may be relied upon in making effective the standards adopted. These standards represent the co-ordinated thought of some 500 executives, engineers and practical field men, representing the bulk of the important operating companies, both large and small, who shared with equipment manufacturers the reaching of a common understanding of essentials for making standardization a success.

Their task has not been an easy one, but individuals and companies find that tediously long hours spent in developing standards of operating practice are now bearing fruit. Progress reports, many of them showing the work of committees had been completed, were today before the general standardization committee and a committee of the board of directors of the American Petroleum Institute. The purpose of this joint meeting was to consider and approve reports, which was largely a perfunctory proceeding because of the harmony and close contact that had marked the relations of the general committees with the sub-committees.

Meetings on Monday

As regards committees that had not previously finished their work, many of them completed the greater part of their tasks at Monday meetings held a day in advance of the official opening of the Institute, Tuesday. Their work included inter-committee meetings at which agreements were reached on related points involving decisions of two or more committees.

A group session on standardization, called for Wednesday, had for its purpose the presenting of reports by each national chairman on the general status of the work assigned to his committee. A total of 10 special committees are headed by the following national chairmen:

Belting—A. H. Riney, Phillips Petroleum Co., Bartlesville, Okla.

Boilers—A. B. Steen, The Texas Co., Houston.

Cable Drilling Tool Joints—Thomas Fleming, Jr., Oil Well Supply Co., Pittsburgh.

Standard Rigs and Derricks—Walter W. Fondren, Humble Oil & Refining Co., Houston.

Pipe and Casing—J. Edgar Pew, Sun-Oil Co., Dallas.

Rig Irons—H. J. Lockhart, Parkersburg Rig & Reel Co., Parkersburg, W. Va.

Rotary Drilling Equipment—Captain J. F. Lucey, Lucey Petroleum Corp., Dallas.

Wire Rope and Manila Cordage—C. C. Scharpenberg, Standard Oil Co., (California), Bakersfield.

Pumping Equipment and Engines—A. V. Hoenig, Carter Oil Co., Parkersburg, W. Va.

Steel Storage and Production Tanks—G. M. Vandaveer, Midwest Refining Co., Casper, Wyo.

President Pew of the Institute, who is also national chairman of the tubular goods committee, recently announced that casing made in accordance with A. P. I. casing specification No. 5-A is now available to the industry.

Tubing and Sucker Rods

Tubing and sucker rod specifications, handled under the committee on pumping equipment and engines for production purposes, were reported on at Los Angeles. Manufacturers had been asked by Mr. Hoenig to offer suggestions with regard to lengths of couplings on plain tubing; threads on upset tubing; and the taper on the shoulder of the upset, which users are agreed should be gradual.

The pumping equipment committee had previously reached the conclusion that it would be possible to standardize on the size of engine bed-plate foundation bolt holes, flange clutch connection and the width of belt pulleys for similar size engines; and the amplification of these phases of standardization is still under way.

District sub-committees will go over further with the manufacturers' sub-committee specifications covering polish rods, stuffing boxes, casing heads, wire line rope sockets, sinkers, valve stems, valves, etc.

Work of the special committee on standardization of steel storage and production tanks is still in the analysis stage. The committee may be said to be in agreement to the effect production tanks should be gas tight and that all new tanks should be of steel construction throughout. Besides minimizing evaporation and tending to maintain original gravities of crude, gas tight steel tanks provide against fire hazards.

In addition to recommendations on sizes of tanks ranging from 30,000 barrels to 80,000 barrels, specifications were asked on riveted tanks of less than 30,000 barrels capacity, welded tanks of similar sizes and bolted tanks. It was felt that it would be well to have a standard tank designed for each size used. Tanks now being manufactured are different in size of plates, punching for rivets, interior roof supports and fittings furnished.

Rotary Drilling Equipment

Two sections of Captain Lucey's report on transmission standards and miscellaneous standards for rotary drilling were ready for the board of directors in advance of the Los Angeles meeting. After review at Dallas and approval of the general committee, the sections numbered 7 and 7-A were docketed only for suggestions that might have developed after the Texas conference last June. These reports were published in sections some time ago, in order that completed parts of specifications could be utilized at the earliest practicable date.

Under sections 7-B and 7-C, affecting standards for tapered joints for rotary drilling and slush pumps, respectively,

Sixth Annual Meeting, American Petroleum Institute, Los Angeles, Jan. 19, 20 and 21

work proceeded at Los Angeles. Progress was reported with regard to standardization of slush pumps, especially as pertained to dimensions rather than form of parts. Refinement of details rather than basic pump construction is affected in this work, which is being discussed to the end of providing interchangeability of valves and seats among other things.

Threads for pipe ends, drill collars and swivel connections came into the picture at Los Angeles when discussion was begun on section 7-B of the report. The flat V-type thread had been favored by the Oklahoma district operators at the Dallas conference as against the A. P. I. Acme type thread on tool joints. Other districts were not in favor of having the same taper on fishtail bits as on the tool joints.

Chairman H. W. Fletcher of the subcommittee on drill pipe, who is also chief engineer of the Hughes Tool Co., Houston, was in touch with T. D. Davies of the Oil Well Supply Co., chairman of the pipe manufacturers' subcommittee, after the Dallas conference, regarding allowance for creep of threads.

Mr. Fletcher's committee had previously made definite recommendations on sizes and threads of drill pipe, which were very closely in accord with the drill pipe manufactured by the National Tube Co., except that the committee did not concur in the practice of having the drill pipe butt in the center of the coupling; the committee contending that a certain number of threads should be allowed, to provide for creep.

The Dallas conference accepted Mr. Fletcher's committee report but provided for further discussions with pipe mills regarding the allowance for creep with the idea that differences could be reconciled.

Discuss Thread Types

Difference having been reconciled on standard drill pipe threads by Messrs. Davis, Fletcher and their co-workers it was moved by Frank F. Hill, manager of field operations for Union Oil Co. of California that the report be approved this was seconded by R. E. Allison, drilling contractor of Shreveport, and the rotary drilling equipment committee proceeded in discussing the relative merits of Acme Type threads and V-Type threads for A.P.I. Standard tool joints. The Mid-Continental district committee of which Ernest J. Nicklos of The Texas Co. was chairman had previously taken a stand that the tool joint standardization program be left open for more thorough working out by operators with the hope of definite recommendations a year hence. It was apparent for the discussion in committee at Los Angeles that this subject insofar as V-Type and Acme threads were concerned could not be disposed of finally at the present time.

Dimensional standards for cable drilling tool joints had been adopted by the board of directors of the Institute in the fall of 1924, hence constituted no phase for general discussion at the Los Angeles sessions.

Details of companies using A. P. I. reference master gages for cable drilling tool joints and other facts about the committee's work were given on page 47 of the June 24, 1925, issue of National Petroleum News.

Work of the standard rigs and derricks committee, of which Walter W. Fondren of the Humble Oil & Refining Co., Houston, is national chairman, proceeded toward completion. Dimensional standards were decided on at the Dallas meeting and the committee's progress report has been under review by districts.

Mr. Fondren made it clear to both operators and manufacturers that it will not be necessary for them to discard present equipment, but that in the future the industry can gradually work up to specifications offered. The committee recommended that in final adoption of standardization specifications consistent tolerances be allowed where accurate dimensions are not essential.

Research On Belting

Findings developed in research work on the strength of belting were before Mr. Riney's committee at Los Angeles, these taking account of physical properties and tests.

Mr. Scharpenberg, as national chairman of the wire rope and manila cordage committee, reported in advance of the Los Angeles meeting that he understood the rig and derrick committee had taken into consideration a request for larger openings through the water tables; that the rig iron committee had provided in its specifications for the larger pulleys requested; and that recommendations of the manufacturers' subcommittee on wire lines and manila cordage would be reviewed at the Los Angeles meeting by district chairmen if received in time.

The wire rope committee among other things made certain changes on groove depths for shieves and with minor exceptions the rotary drilling committee accepted similar recommendations by the wire rope group.

Mr. Steen's committee on oil field boilers had up for discussion the size and location of dome, drilling of stay bolts, state regulations and other phases of standardization.

The A. S. M. E. code reads as follows:

"When a dome is located on the barrel of a locomotive type boiler, or on a shell of a horizontal return tubular boiler, the diameter of the dome shall not exceed 6/10 the diameter of the shell or barrel of the boiler."

It will be noted from the foregoing that when the dome is located on the shell its diameter shall be 6/10 of the shell diameter. This provision does not apply when the dome is located over the firebox in the locomotive type.

At the Dallas meeting the majority of those present agreed to place the dome, in the locomotive type, over the firebox, and recommended that this be 36 inches in diameter, or larger. This recommendation caused much comment, and in order to definitely settle the matter the various districts were requested to advise their preferences on the question.

The A. S. M. E. code also provides:

"The outside end of solid staybolts eight inches and less in length shall be drilled with a hole at least 3/16-inch in diameter, to a depth extending at least one half inch beyond the inside of the plates; or hollow stay bolts may be used."

Under the A. S. M. E. code, in a boiler with a grate area exceeding 15 square feet the telltale holes must be drilled. Certain 50 h.p. boilers could escape this regulation under the ruling; and others would be included because of the slight variation in dimensions of fireboxes.

Cost of drilling these telltale holes involves an average outlay of $20 to $25 per boiler, but if they add to the safety of the boiler then the point is made that the amount involved is immaterial. Before taking the question up with the A. S. M. E. boiler code committee Mr. Steen's committee sought to decide whether telltale holes should be eliminated entirely for all sizes; and whether the drilling of telltale holes had been of benefit, considering that this stipulation is essentially a safety provision.

Placing of the dome on locomotive type boiler failed to be agreed on but the boiler committee was in accord on other subjects before it and a finished report was ready for the Institute board and the general standardization committee when it met.

Study State Regulations

As regards state regulations, some states have adopted boiler codes that contain certain changes from the A. S. M. E. code. A canvass of such modifications was made, so that specifications could be included in A. P. I. specifications or reference made to them so that boilers can be properly manufactured for such states.

Carl Young, of Dallas, director of standardization for the Institute disclosed in a talk before the rotary drilling committee that a general committee on all types of gauges with which manufacturers and operators are concerned is planned. Action on this committee is yet to be taken.

Dunn Agrees to Continue Present Vapor Pressure Testing Methods

By Paul Truesdell
N. P. N. Staff Writer

LOS ANGELES, Jan. 19

A SOURCE of grief to the natural gasoline manufacturers of the country was wiped out when the Institute committee on testing methods for determining the vapor pressure of natural gasoline, at a meeting held Jan. 18, obtained agreement of Colonel Dunn, chief of the bureau of explosives of the American Railway Association on the proposition that vapor pressure by itself is no index to the safety or hazard of shipping compression or absorption gasoline.

Committee members also convinced the colonel that the present rules for shipping natural gasoline should remain in force and that the vapor pressure determinations recommended by some members as being desirable as a check against a possible tendency on the part of some manufacturers to ship too wild stuff be made with the bomb and by the method known as the bureau of explosives method which is now in general use.

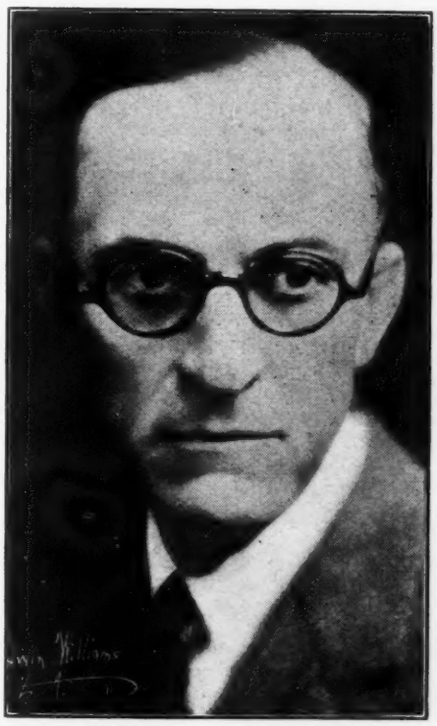
Colonel Dunn had been in favor of changing from the bureau of explosives bomb to the so-called Anderson bomb developed by Dr. R. P. Anderson, technologist of the American Petroleum Institute. As a result of the meeting, Colonel Dunn said that he would consent to continuation of the present bomb and the present testing methods and rules and would recommend to the Interstate Commerce Commission which governs the shipping of commodities that the proposition of the natural gasoline manufacturers be accepted without a hearing. Whether the commission would accept the proposal without calling for additional evidence he didn't know.

In discussion of the hazards of natural gasoline shipping and methods of safeguarding against them, R. L. Pillow, assistant to the president of the Standard Oil Co. of Louisiana, W. K. Holmes, manager of the Tulsa refinery of The Texas Co., H. C. Oberfell and A. N. Kerr took an active part.

Vapor Pressure No Guide

Mr. Pillow, in refuting the belief that vapor pressure is a sure index to the hazard involved unloading tank cars, where most of the hazard is admitted to be encountered, stated that his company has unloaded without accident more than 1500 cars of natural gasoline at its Baton Rouge refinery with vapor pressure ranging up to 20 pounds (10 pounds is the maximum allowed to be shipped under the present rules in uninsulated cars). He said that the way to safeguard against accidents is to vent the car by intermittently opening the safety valves until the pressure is all off. Then the dome cover can be removed safely and the car unloaded. Mr. Pillow said that he had constructed a tank of 15 gallons capacity for experimental purposes, exactly reproducing a tank car in proportionate dimensions and had made tests with blends of U. S. motor and natural gasoline ranging up to 50 per cent of the latter. In these tests he removed the dome cover instantly without venting the tank and in not a single instance, he said, did he get a boiling over of the liquid. Considerable gas escaped when the dome was opened suddenly, he said, but it was light gas which rapidly dispersed into the air and disappeared.

What causes the most danger he pointed out, is the spurting out of liquid gasoline when the dome cover of a tank of straight natural gasoline is opened before the pressure is relieved this liquid immediately gasifies and being heavy, settles to the ground where it is likely to be ignited by an open flame of a boiler or still furnace or a spark.



W. R. Guiberson, chairman California Chamber of Mines and Oil reception committee for A. P. I. He performs much of the work of arranging for the annual banquet

W. K. Holmes pointed out that economic necessity is compelling the natural gasoline manufacturer to ship a gasoline of a high recovery which means a stable product to meet the standard specifications laid down by the association of natural gasoline manufacturers. The association was given credit for having laid down these standards which all buyers demand be met. Mr. Holmes said that his experience convinced him that it was the presence of propane in the gasoline that caused the tendency to boil over and that economies demanded the propane be removed before the gasoline is shipped or the losses will be too high.

Determination of Hazards

Dr. T. G. Delbridge, of the Atlantic Refining Co., suggested that a distillation test of the gasoline would give an indication of the hazard to be expected from it and A. N. Kerr, of the Rock Gas Products Co., Pittsburgh, suggested making a test by setting a beaker of gasoline on a postal scale, warming it with the hand or air in case of hot weather, taking the temperature at which it boiled and noting by means of the scale the weight of the liquid lost as a test of its hazard.

The consensus of the meeting was that greater safety in the handling of natural gasoline as well as refinery gasoline is a matter of educating the men handling it. It was pointed out that the elimination of hazard is perfectly simple, merely depending on the carefulness of the men doing the unloading. Mr. Holmes pointed out the great improvements that have been made in the designs and constructions of tank cars and told Colonel Dunn that the industry itself through its greater knowledge of the hazards and its economic need to meet specifications is bringing about gradually the ideal toward which the colonel is striving, that is the elimination, so far as it is humanly possible, the hazard from the handling not only of natural gasoline, but of refinery gasoline as well. Mr. Holmes told the colonel that while his own and many other companies are unloading natural gasoline entirely through the dome, the elimination of the bottom outlet valve would work a great hardship of the industry that would be unjustified. He said that it is often necessary to use gasoline cars at certain seasons for shipping fuel oil and this could not be unloaded neither could cars be properly cleaned if the bottom outlet valve was taken off.

PEORIA, ILL.—A $100,000 garage, machine shop and tank yard which will be ready for occupancy about Feb. 15, is being erected here by the Standard Oil Co. of Indiana.

Sixth Annual Meeting, American Petroleum Institute, Los Angeles, Jan. 19, 20 and 21

Institute is Asked to Take Over Safety Work for Industry

By Paul Wagner
N. P. N. Staff Writer

LOS ANGELES, Jan. 19

UNIFIED petroleum safety work to be established and maintained by the American Petroleum Institute came before the Los Angeles meeting as a program which was described as opening many channels for public relations work of the Institute.

It was tentatively proposed to the board of directors that the safety work previously carried on through the Petroleum Safety Council of the Mid-Continent Oil & Gas Association should be taken over by the Institute and carried forward in each part of the country where more than fifty workers in the industry are located.

The suggestion was presented to the board by Henry W. Boggess, of the Sinclair companies, president of the council at the invitation of President J. Edgar Pew of the Institute. It was explained that the plan was also submitted with the sanction of the executive committee of the Mid-Continent Oil & Gas Association.

An estimated budget of $57,300 to maintain an Institute program on safety for one year was submitted. In this connection it was shown that the Petroleum Safety Council is now operating on about $30,000 yearly in the five states under Mid-Continent jurisdiction and that the suggested budget for an Institute campaign throughout the country would reach four times the territory and all employees of the industry at a cost of less than double the amount now being expended.

The general structure of the organization necessary to administer a national program was suggested as constituting a governing board and an executive committee functioning as follows: Governing board—consisting of one state chairman from each petroleum state in the United States, one of whom is to act as secretary to the board, a general chairman and a general vice chairman of the board. The governing board would hold a general meeting at the place and time for the annual Institute gathering at which governing boards would be selected. The board's duties would include to the outlining of plans, policies, etc., for recommendation to the executive committee of division of safety. Executive committee — consisting of the chairman, vice-chairman and secretary of the governing board, counsel and president of the American Petroleum Institute. The executive committee would be empowered to employ a competent director of safety whose whole time would be devoted to maintaining the national petroleum safety program.

All expenditures other than those of routine character would require approval of the executive committee which would have general control over the program plans, policies, etc.

It was pointed out to the Institute board that in addition to the reduction of accidents throughout the petroleum industry in all America, the Petroleum Safety Council believes it can be of great service to the Institute in other ways. In particular it was pointed out that it could be of service in disseminating work of the standardization committees and also in carrying to employees and the public at large the Institute public relation program.

Uniform Balance Sheet Is Drawn Up

Staff Special

LOS ANGELES, Jan. 18.—Considerable progress has been made the past year on drawing up a standardized accounting method for the oil industry generally, a work which is comparable in its importance to the Institute's standardization program. The special committee which has this work in charge under the direction of W. M. Mattison, of the Institute staff, has been meeting in Los Angeles for two weeks preceding the general Institute meeting, reaching the point where they have drawn up a model subsidiary balance sheet, and the principal features of consolidated balance sheet.

This general balance sheet will be presented for discussion at a group session Jan. 20. Next steps in this work will be the simplification of the consolidated balance sheet and the defining of various items that make it up. By the next annual meeting of the Institute it is hoped to have the work completed so that a model form of accounting can be offered the oil industry, capable of being adapted to the needs of any individual oil company, whether engaged in all branches of the business or only one, and whether it is a big company with many branches or a small local company.

It is said the oil industry is the first in the country to voluntarily undertake the task of working out a uniform method of accounting and that it will make a great saving for the industry in insuring that proper tax returns are made, among other things.

Working with Mr. Mattison in Los Angeles have been George Winters, Philips Petroleum Co., Bartlesville; Clarence Jay, Pure Oil Co., Columbus; Mr. Humphreys, Skelly Oil Co., Tulsa; and Rodney S. Durke, General Petroleum Corp., Los Angeles.

Plan For Future Work on Fire Prevention

Staff Special

LOS ANGELES, Jan. 19.—The committee on fire prevention with a large attendance and in session all the afternoon of the eighteenth laid out a big program of future work. Directors of the Institute will be asked to approve the bringing of records of all fires where oil is a factor up to date, as to their number, causes and effect and to maintain in the Institutes offices hereafter a perpetual fire record.

This, chief engineer C. H. Haupt of the Standard of New Jersey explained, would permit engineers to plan the exact equipment and construction necessary to eliminate many fire causes.

The committee also desires authority to have oil company engineers investigate important fires where necessary, that an unbiased report may be had to combat possibly unfair legislation it also desires to promulgate better standards of construction and fire protection and act as a clearing house of information for combating unfair legislation.

The committee approved the settlement the industry representatives have been able to make recently with the flammable liquids committee of the National Fire Protection Association that tank distances shall be left to individual consideration in each case but that small station tanks of refined oils shall be not less than one tank diameter from adjoining property.

The committee voted to ask the Institute directors to arrange for a thorough investigation of kinds and sizes of vents and their protection for tanks, the committee having in mind the directors might ask this investigation be done with some of the endownment John D. Rockefeller has made for scientific research for the industry.

Secretary Wentworth of the Fire Protection Association attended the meeting and commended the committee and oil industry on the progress made in fire prevention.

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Hild Device for Automatic Control in Rotary Work Easy to Operate

By Thomas Fleming, Jr.,
Vice-president, Oil Well Supply Co.

A DESCRIPTION of the Hild Electric Drive appeared in these columns some time ago. Now, with the greater experience in the use of this equipment, Mr. Fleming describes it and its operation. Not the least important phase of the description is that it is in such terms that the reader doesn't have to be a mechanical engineer to grasp it.

Mr. Fleming presented this paper at the group meeting of the A. P. I. devoted to improvement of oil drilling and production methods. He quoted from a letter from the chief engineer of the Gulf Production Co., as follows:

"We found the flexibility of the Hild Drive to be such that it was possible to regulate the feed of the drill stem or the weight of the drill bit on bottom to any desired speed or weight, and once fixed by the driller it would stay fixed. No dependency was placed on him to feed the bit manually and he was not under fatigue stress." The importance of which will be immediately recognized by every rotary operator.—Editor.

THE need of an automatic control in drilling operations has been recognized by leaders among the oil producers for many years. This need has become more pressing as drilling operations have gone to greater depths requiring more power and heavier equipment and involving a larger outlay in time and money for the completion of a single well.

In 1922 Frederic W. Hild of Los Angeles brought to the Westinghouse Electric and Manufacturing Co., and Oil Well Supply Co. the idea of using a differential gear set to accomplish this result. These two companies agreed to undertake the development of this device and after considerable experimental and test work had been carried out, the first of these outfits equipped for electric drilling started operating in December, 1923, for the Chanslor-Canfield Midway Oil Co. at Torrence, California. This outfit was remarkably successful in that it not only demonstrated the practical application of the theory of this device but also proved to be properly designed and constructed. Only a few minor changes have been necessary in outfits sold since the first outfit, and the first outfit is still being operated and it is in first class condition. Six wells have been drilled to date with the first outfit.

Following the initial installation in California, The Gulf Production Co. decided to install an outfit on its properties at Hull, Texas. This outfit started drilling in the summer of 1924 and has completed successfully five wells to date. The equipment is reported to be in first class condition showing practically no wear.

The present development of the drive is for electric rotary drilling. It can be developed for the steam or internal combustion engine, but electricity was selected for the first development on account of its flexibility and closer uniformity of control. The apparatus and the principles of operation are very simple. There are no intricate devices or complicated arrangement of mechanism.

Briefly the drive consists of a differential reduction gear and two motors assembled as a unit. These motors drive the bevel gears which operate on the differential gear. It is the function of one motor to drive the rotary table. The second motor operates to control the differential which is connected to the hoisting drum of the draw works.

How Differential Operates

Now in order to understand just how these two motors function to produce automatic drilling let us consider the operation of this differential gear. When both bevel gears revolve in the same direction at equal speed the differential revolves in the same direction at the same speed. When both bevel gears revolve in opposite directions at equal speed the differential is stationary. When there is a difference in the speed of the bevel gears, both operating in the same direction, the differential will rotate at the average of the two speeds, and when they are operating in opposite directions the differential will rotate in the direction of the gear with greater speed and at one-half the difference in these speeds.

Therefore, when the two motors are running at or near full speed in opposite directions the hoisting drum of the draw works, which we have already noted is attached to the differential, can be rotated forward or backward by a slight variation in the speed of one motor.

These speed changes may be caused by load variations which is the condition when automatically feeding the drill stem for drilling. One motor is then driving in the direction of lowering the drill pipe and is operarting the rotary while the other motor is driving in the opposite direction and operating against the differential with a tendency to hoist the drill pipe. If the brake is set the differential is stationary and the two motors are at equal speed. The rotary machine and the drill stem are then rotating but the drill stem does not move up or down. When the brake is released the weight of the drill pipe pulling on the hoisting drum exerts a torque (turning force.—Ed.) on the differential and consequently on the two motors. This will tend to speed up the motor operating the rotary and slow down the other motor. Consequently with this difference in speeds the drill pipe will start to move down. The effect of this descending weight on the drilling motor is to induce a negative load on it and consequently it functions as a generator and serves as a dynamic, regenerative brake. This coupled with the hoisting action of the other motor limits the rate of downward movement of the drill stem and prevents any sudden drop.

Automatically Hoists Bit

When the bit presses on bottom, the drilling motor receives a load and tends to slow down. As this load increases, the downward movement of the drill stem approaches zero as the drilling motor is approaching the speed of the regulating motor and when some serious obstruction is encountered such as boulders the drill stem moves upward as the speed of the hoisting motor will then exceed that of the drilling motor. It will therefore be seen that by adjusting the speeds of the two motors, a limiting pressure on the bit can be set and that the bit will automatically retrieve when this pressure is reached. It will also be noted that by operating both motors in the same direction the combined power of both motors can be utilized for hoisting purposes.

No complicated mechanical apparatus has ever met with approval or success in this branch of the petroleum industry

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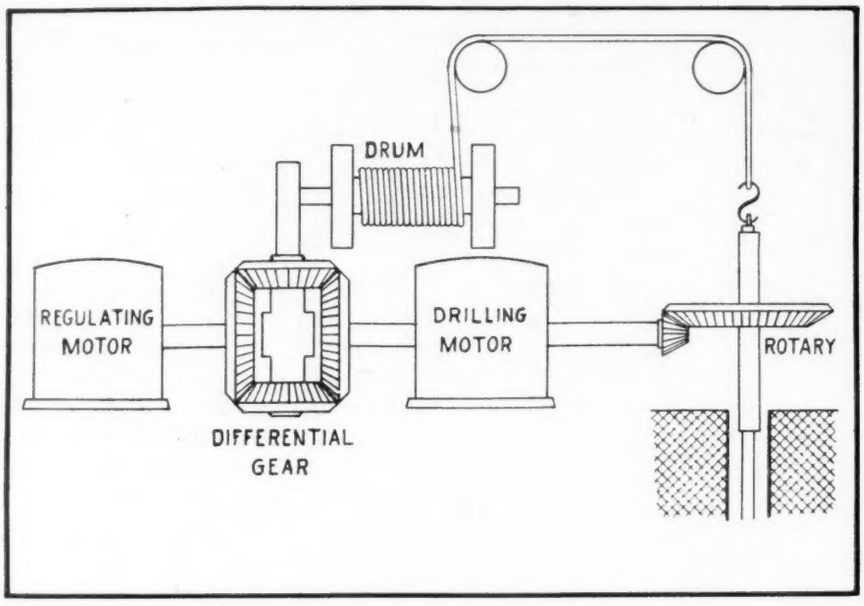

General arrangement of drilling unit using Hild drive.

and this particular apparatus is free from the objectionable feature entirely. The gear case and motors are mounted on a common base and occupy about the same space as a twin engine.

Location of Unit

This unit replaces the usual steam equipment of boilers and engine. It is located in the same position as occupied by a twin engine, in the rear of the draw works. The only difference between the arrangement of the two, is that the differential drive requires two chains to the line shaft of the draw works. One chain is connected to the drive sprocket on the line shaft exactly the same as in the case of a twin engine. The chain handles the entire load in pulling the drill pipe out of the hole when both motors are compounded. During drilling it is operated by the differential gear. The other chain engages a quill sprocket keyed to the line shaft and located in the same position on the line shaft as the sprocket which drives the rotary when a twin engine is used. This chain is driven by the rotary drive motor and upon the hub of the sprocket on the line shaft is the clutch and sprocket that drives the chain connecting with the rotary table. This special quill arrangement can be installed in any standard type of draw works.

The electric motors are controlled by a throttle located in the same position as it is in operating a steam outfit and connected by telegraph cords to the controllers of the motors. This throttle is composed of two wheels compactly arranged on the same axle which permits the motors to be controlled individually. Stop push buttons are also installed at the throttle position which will permit the motors for both the gear set and the pumps to be shut down instantly in case of emergency. Under ordinary conditions of drilling up to a depth of 4000 feet, two 15-35 h.p. variable speed motors of the reversible type can be used in operating the gear set, and two 50 h.p. motors in operating the slush pumps. In deep drilling a 35 h.p. and 75 h.p. motor are required on the gear set. The size of motors depends on the character of drilling and size of drill pipe.

Steady Operation

The operator when drilling with the Hild Electric drive throws the brake wide open and often leaves it for the full length of the "Kelly." Records on several wells drilled show steady operation for four solid hours. This automatic feed reduces the strain on the machinery and equipment which is experienced in the intermittent method of applying the brake in hand operation and at the same time gives the driller more time to supervise.

An important item of auxiliary equipment for the use of this outfit is a recording graphic watt meter. This is installed in the power line to the differential drive and furnishes a continuous record of the power operation from which it is possible for the staff office to determine exactly what has gone on. In fact, it gives a complete drilling history of the well. Additional information can be secured covering the pumping operations by placing one of these meters in the pump power circuit.

The wells drilled by the Chanslor-Canfield Midway Oil Company were started with 20-in. hole for 900-ft. depth on the Torrence wells and 18-in. hole for 600-ft. depth on the Del Amo wells. The wells were finished 7¾-in. The drilling varied from sand and boulder formation to shales and shell formations.

The wells drilled by the Gulf Production Company started with 16-in. hole and finished with 4½-in. liner. The formations drilled through consisted of clay, sand, gumbo, boulders and heavy layers of rock. Rock bits were used for drilling through some of the rock formations.

The Chanslor-Canfield Midway Oil Company drilled two wells at Torrence at an average depth of 3703 feet and an average cost of power of 28.8c. per foot (Power rate $0.01617); and four wells at Del Amo at an average depth of 3599 and an average cost of power of 9.5c. per ft. (Power rate $0.009504.) The Gulf Production Co. drilled five wells at an average depth of 3451 ft. and an average cost of power of 20.4c. per ft. (Power cost $0.02.) Records of several wells showed that one-third of the power consumed was used by the slush pumps. The Gulf's estimate of steam power cost with fuel oil at $1.50 per barrel was 55.5c. per ft. or over double the electric power cost.

Operators Are Pleased

It is the opinion of the operators of the two large producing companies who have pioneered this device that it is flexible, has plenty of power, functions perfectly as an automatic device, and that it will drill as quickly as other devices and with a lower power cost. The automatic feature appears to obtain a straighter hole and to minimize twist-offs with resulting fishing jobs. The recording charts give the superintendent's office a complete record of all drilling operations.

This apparatus has been developed and placed on a successful operating basis through the combined efforts of the manufacturers and operators hereinbefore mentioned. Too much credit cannot be given the Chanslor-Canfield Midway Oil Co. who pioneered this device, the Gulf Production Co., and the field staffs of both companies for the vital interest they have shown in conducting the field tests. The high grade engineering and operating staffs of these companies are in line with the present trend in the oil industry to operate along scientific lines and will no doubt materially assist in other ways toward progress in this industry.

With Ordinary Precautions, Static Electricity is Not Dangerous

By J. A. Watterson,
Standard Oil Co. of Ohio

"STATIC" became a household word with the introduction of the radio. To the oil man, it was merely an old foe attacking at a new point. Mr. Watterson discussed protective methods in petroleum marketing before the group meeting on fire prevention and protection on the A. P. I. meeting in Los Angeles.

Mr. Watterson pointed out that protection against static hazards may easily be carried to the point where safeguards will be set up against purely theoretical dangers; what the oil industry requires is study of and safeguards against the troubles that actually occur.—Editor.

THE phenomenon of static electricity is rather difficult to explain. Authorities differ in some respects on this subject. Some writers believe static is built up by friction, while Dr. Elihu Thompson in a recent article proves that static can be built up without friction. It would seem, however, that static as applied to the oil industry is usually caused by friction. Most authorities agree that what really takes place is a separation of positive and negative parts of electricity, which permits a building up of one or the other until a high enough potential is reached to cause a spark to jump across an air gap.

There are but two things to do to remedy this condition, either prevent the separation, or provide an easy means of rejoining. It would appear that the most practical way to meet this situation would be to ground the danger points and thus make it unnecessary to provide a means for the rejoining. If there are metallic connections between any two points and these connections are unbroken and uninsulated, there should be no trouble from an electric spark, because in this way there can be no difference of potential between the two points. It is along these lines of grounding that we must look for a solution of this problem.

To inter-connect and ground all metallic parts of apparatus handling inflammable liquids is not an expensive operation, and with ordinary precautions static electricity is not a dangerous element. In the recommendations of the Static Committee of the American Petroleum Institute an effort has been made to recommend only such precautions as are absolutely necessary. An elaborate system of bonding and grounding to guard against static, would be very costly and a burden on the industry and also might result in a feeling of security which would allow for dangerous hazards to exist unnoticed.

J. A. Watterson

In answer to the questionnaire sent out by the static committee, it was noted that static electricity is being confused with stray currents in general. Reports of fires at first attributed to static have been traced to many other causes. Stray currents running between electric street car tracks parallel with side tracks and which were both crossed by electric interurban lines is one that has been noted in several reports. This is a hazard that is entirely different from static and as each case has its own peculiarities, must necessarily be handled as such. Insulating of side track and bonding of pipe lines to side track and all other equipment will usually remedy this condition. However, the simple rules as suggested by the Static Committee for bonding to unloading points will form an additional protection. It must be understood these rules will not eliminate stray currents and are devised for static only, but will greatly reduce the hazard.

A few of the larger companies are combining their static and stray current protection. However, this makes a very complicated and expensive installation and is furnishing protection against a hazard that exists in only a few isolated locations. I believe that a simple and inexpensive bonding system, if properly installed, will prove just as effective as some of the more extensive systems suggested and will be adopted and used by a greater number of the oil companies.

Where it is Found

The presence of static has been reported in a great many operations, such as loading and unloading tank cars, loading tank trucks, unloading tank trucks at service stations, loading and unloading boats at seaboard terminals, tank steaming, sand blasting, spray painting, barrel filling and many others. At one station it was reported that rolling steel drums over a wood floor to filling lines had built up enough static in the drum to cause a spark and ignite gasoline when the drum was brought in contact with the filling spout. This was remedied by placing a steel plate under the drum at filling point and grounding it to the filling spout. Some of the most prevalent causes of the building up of static electricity are non-metallic filling equipment such as rubber hose, metal line hose not equipped with metallic terminal, and filling spouts insulated from pipe lines by poor connections. Rust and paint are also responsible for poor connections in a great many cases.

Many patents have been filed in the United States Patent Office claiming to reduce static hazard. One inventor claims that charges accumulate on the surface of gasoline in a tank. These charges it is said are generated by the friction in the filling pipe and may cause a spark along the surface of the liquid to the side of the tank,

which will ignite the vapor. He proposes a wire netting floating on the surface of the liquid and connected to the shell of the tank by metal chains. Another device called a "Static Controller" for tanks provides a number of vertical rods immersed in a tank. These rods connected to a pipe ring, which is grounded. It is generally agreed in the Oil-Industry that the air and gasoline mixture in the upper part of a tank is too rich to be ignited by an electric spark and devices of this kind seem unnecessary for usual practice. An all-steel vapor-tight tank which has been electrically grounded by resting directly on moist earth, and all-metal connections inter-connected or bonded is an extremely low fire hazard.

Drag Chains Recommended

Tank trucks should be equipped with drag chains to act as bleeders to carry off any static that may have accumulated in the tank from causes such as the surge of the contents, the air friction of heavily-traveled thoroughfares and other causes. This recommendation is not in line with the findings of a committee in the East who state that drag chains are dangerous and inefficient, but who agree that bonding to loading and unloading points is necessary. Now if bonding is recommended, it is an admission that static exists in the tank truck and if the bleeding off can be accomplished by as simple a means as drag chains, this added precaution is well worth installing.

Tank steaming, it would seem from experiments made recently, can be a very dangerous operation if all lines are not connected and bonded to the tank, but if this bonding or grounding is intelligently done, no static can be built up and therefore there can be no danger.

Spray painting carries practically the same conditions, and the object being painted should be uninsulated and grounded to moist earth. It has been found that 10,000 volt will quickly built up on insulated tanks being painted with a spray gun.

Many other operations are thought to be subject to static hazard and there is plenty of room for investigation in this field. However, it would be well to avoid heaping upon the industry unnecessary regulations that will become so costly they will not be universally used.

In future investigations the fact should be borne in mind that a real remedy for what actually takes place in practice in the field and refinery is what we are looking for, and only actual hazards and not theoretical danger should be considered. Several oil companies are now making field tests on this subject and their findings when complete will greatly add to our knowledge of Static Electricity.

Bloomfield Mesa Field Yields 64° Be. Oil

The Bloomfield Mesa field of San Juan county, N. M., has been the scene of considerable drilling and a small gasoline plant is in operation there. This is in the county where the Hogback pool produces high gravity oil. The following is a brief report issued by the U. S. Geological Survey.

* * *

INTEREST in the Bloomfield Mesa field was aroused by the completion on Nov. 15, 1924, of the Bloomfield Oil & Gas Co.'s No. 2 well, in the northeast corner of the NW. ¼ NW. ¼ sec. 22, T. 29 N., R. 11 W., at a depth of about 706 feet. The well had an initial daily yield of 5 or 6 barrels of 64° Baume oil with considerable salt water. The light gravity of the oil and its occurrence at so shallow a depth led to active exploration in nearby areas, and by the latter part of June, 1925, when the field was visited by W. W. Boyer and G. H. Hansen, of the Geological Survey, Department of the Interior, seven wells had been completed, capable of producing daily from 1 to 6 barrels of oil each. Moderate flows of gas, some of it carrying appreciable quantities of gasoline, had been developed by several other wells. The largest gas well gave an initial yield of about 2,000,000 cubic feet of dry gas a day, which was piped to different parts of the field and used as boiler fuel in drilling.

Stratigraphy

According to J. B. Reeside, Jr., the indurated rocks exposed at the surface of Bloomfield Mesa are of Tertiary age and belong to the Torrejon formation of the Nacimiento group. At depth the wells penetrate the Ojo Alamo sandstone, of Tertiary (?) age, below which are the Upper Cretaceous (?) McDermott formation and the Upper Cretaceous Kirtland shale. The Farmington sandstone member of the Kirtland shale, which usually occurs at about the middle of the formation, contains the productive beds. This member, composed of lenses of sandstone in shale, is of fluviatile origin and is therefore very variable in thickness and composition, although persistent as a unit for many miles along its outcrop around the San Juan Basin. Observations by Reeside and others show that the individual sandstone beds are not persistent and may be entirely replaced by shale within a few hundred feet.

Structure

The stratified rocks at the surface of the Bloomfield Mesa field apparently dip at most places a few degrees north of east, at a rate of 20 to 30 feet to the mile. A subsurface map showing the configuration at the top of the Ojo Alamo sandstone would give the impression, however, that this general dip is interrupted by two very low domes, one with its apex near the Coal Creek wells, in sec. 20, T. 29 N., R. 11 W., and the other with its higher part near the Montezuma Syndicate well, in sec. 13, T. 29 N., R. 11 W., separated by a syncline near the Bloomfield Oil & Gas Co.'s wells in the SW. ¼ sec. 15 and the NW. ¼ sec. 22.

It is possible that the form at the top of the Ojo Alamo sandstone is due chiefly to original irregularities in deposition and that the apparent folds do not really exist. Moreover, owing to the presence of unconformities at the top and base of the Ojo Alamo sandstone, it is unlikely that such a subsurface map would properly reflect the structure of the underlying beds. Local folding has apparently had no important part in the accumulation of oil and gas in the field, though there are some suggestions of a broad fold, with its axis running from the rim of the San Juan Basin toward the center of the basin, that may have had some influence.

Oil in Sand Lenses

From all the data available it seems probable that the occurrence of oil and gas at Bloomfield Mesa is controlled by the presence of shale-sealed sandstone lenses in the Farmington sandstone member of the Kirtland shale. Where oil has been found in quantities sufficient for production the drill has commonly released first gas, then oil, and finally salt water. Attempts to shut off the salt water have resulted either in shutting off the oil or diminishing its yield, and operation has shown that where the sand contains oil it also carries salt water. Where wells have passed through the producing zone and have not found oil, salt water is also absent. Many of the wells that have produced oil are adjacent to wells that have not found appreciable amounts of oil or gas.

In the western part of the field, in sec. 20, there appears to be a lens which yields a small amount of oil from the Coal Creek Oil Co.'s wells Nos. 1 and

(Continued on page 54)

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Methods Used in Extending Credit

By F. H. Bowman,
Pure Oil Co.

THE oil industry is one that has no system of credit interchange information. The parallel connot, of course, be closely drawn between credit ratings in this industry and those collected by retail credit managers, for the latter are dealing with the vast public, where one merchant would face an almost impossible task if he undertook to rate his customers without exchange of information with other merchants. In the oil industry, the rating is on the retailer or the re-sale agent.

Nevertheless, Mr. Bowman makes the suggestion that something along that line could profitably be worked out. He told the group conference of the A. P. I. on methods of credits and collections of the methods employed in the industry today in obtaining the information required.—Editor.

CONTRARY to the belief of many, the real function in credit extension work is to find a basis for an extension of credit rather than to find a reason for not extending credit. The common idea of a credit department's function, which seems to be the turning down of orders, reverts to the time when there was no credit departments.

The extension of credit at that time was based on the opinion of the president, or chief executive of the seller, or upon the statement from the head bookkeeper about the buyer's past experience in liquidating his account. Formerly the extension of credit was handled by a combination of executives, sales force, and accounts. Later, part of the head bookkeeper's work was watching the accounts and approving orders, making him a sort of credit man.

Now, in nearly every corporation of any consequence, the credit department is a segregated unit having charge of the customers' ledgers and all functions to do with credits and collections of customers' accounts, lying in with the accounting department by balancing its accounts and bills receivable. The credit department in order to hold up its end of the business is obliged to specialize so that it is able to analyze all the sources of information which are needed to determine the amount of credit.

The credit department tries to prevent as many losses as possible. However, too small a percentage of losses shows an unbalanced condition and lack of good judgment. A credit department may bring their losses to such a point by continually disapproving orders, that the losses in bad debts will amount to such an infinitesimal percentage of the sales that they will not be noticed. Nevertheless, this subnormal condition will reflect in the general overhead through the additional cost in sales expense to such an extent that this is impractical. This additional sales cost is brought about by extra trips and other expenses necessary to find customers who will pass the muster of such a credit department. A credit department must take legitimate chances and "play ball" at all times with the sales department.

As credit is the basis for the greatest percentage of business today, a credit department must function entirely in accord with the policy of its company at the time the matter of credit extension is broached. For instance, when the sales department is exceedingly anxious to move goods, the credit department must dig very deeply in order to find some basis for allowing the goods to be shipped on open terms.

Information on Buyer

Information concerning the buyer is the problem to be worked out. This information must be reliable, must be complete, and must be from varied sources. Then one will check with the other, making all the sources coordinate to the point of extending or not extending credit.

The salesman is the first point of contact with the customer, be it by personal call, telephone or telegraph. We will take the personal call as a basis, as telephone and telegraph orders should be handled in the same way.

Of course, the best source of information is the buyer himself. The financial statement is commonly offered as a basis, and may nearly always be obtained if requested in the right way. The approximate amount of credit which will be required if the customer purchases his maximum requirements from the buyer should be specified so terms may be fixed to meet these requirements and keep the buyer within the proper credit limit.

Banking connections should be specified and trade references given by the buyer. A call should be made by the salesman on the banker given as reference. There, in addition to general information, he may obtain trade references, if he will approach the banker in the proper manner and explain his reasons for seeking this information.

Any observing salesman may also obtain additional trade reference by glancing at trade signs, or trade marked goods, around the place of business. All this information should accompany the salesman's report on a new customer sent in with the first order.

When this report is received by the credit department, inquiries should be sent out to a bank other than a customer's; to both commercial agencies—Dun and Bradstreet; and then to each trade reference listed in the report.

Banker Sometimes Biased

The reason for inquiry from a bank, other than the customer's is because, especially in small communities, a banker financing a concern will be prejudiced in his opinion as to the customer's net worth. In a great many cases he will be over anxious to see that his client obtains a liberal line of credit so that the bank's obligations may be liquidated quickly at any time by transferring the indebtedness from the bank to his various creditors.

The reason for using both commercial agencies is because very often there is a difference in rating or idea of net worth. This will often disclose some discrepancy which will show up in other sources of information.

The trade references obtained by the salesmen disclose through the exchange of ledger information, the line of credit that the customer is now being extended and how he is paying his bills. Any favoritism or crookedness in paying some creditors at the expense of others will show up if your trade reference list is adequate. This source is very essential, a really vital factor in determining a line. Of course the ideal way to handle this would be for the oil industry to have a clearing house and then transcribe all ledger experience to each member of the industry who is interested in any common customer.

For various reasons it does not seem feasible for this industry to operate such a clearing house, but the interchange bureau of the National Association of

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Credit Men has such a plan in operation in most other industries.

Another important source of information is the trade papers. Frequently news, either in a personal item or in a technical discourse, will give the credit department an idea that something is being done by one of his customers which should or should not be done.

Personal Acquaintance Valuable

Then the last and greatest source is the personal acquaintanceship wherever possible. Sometime ago a very efficient sales manager of an oil company was rather at swords points with the credit department of the same company. The breach became wider and finally a representative of the credit department went to the district and called on the salesman's customers. The sales manager was very much surprised at the reception given the credit manager, and the apparent ease with which the credit man obtained all essential information from the customer. This was entirely due to manner of approach. Since that time the attitude of this sales manager with his credit department has been different.

Wherever possible a financial statement should be obtained from a customer. It is very desirable if the line of credit runs into real figures to also obtain an operating statement.

After the information is assembled the analysis begins. The credit department in the oil industry is fairly certain whether the products purchased are for re-sale or consumption. The analysis of course in each case is different. If the customer is going to re-sell, the turnover and how it is to be resold, serves as a basis for credit, or a real analysis of an operating statement.

In case of the consuming customer, his financial statement is generally the basis for extending a line, credit limits are based on integrity and net worth.

Integrity is the real keynote to all extension of credit. A man's character is always disclosed by his business dealings. A corporation's method in paying bills and carrying out contracts reflects the real inside of its personnel.

The net worth is obtained by scrutinizing a financial statement, throwing out all fictitious assets or assets of indeterminable value deflating physical assets to practically a re-sale basis, and deducting all liabilities, except capital stock.

Rating of Brokers

In the oil industry there is a large volume of business passing through brokers' hands. Some companies refuse this business. However, they are a part of the business and credit extension to this class of trade should be based on their ability to pay and their intention to repudiate or stand by contracts according to the turn of the market. Terms of sale enter into the credit limit on the basis of the ratio of time to the amount of credit required. In other words, a sight draft customer might be placed on open terms, provided he would pay his bills each week, whereas, if he demanded thirty-day terms or four weeks' business, he would be entirely out of line for an extension of credit.

The financial statement requested by buyers in the oil industry should be very simple in form, as the customers buying from three to ten carloads per month are usually the ones to whom this financial statement will be sent. As a rule such customers do not keep an elaborate set of books and complicated forms of financial statements only worry them. Larger customers generally publish their statements.

Regardless of the fact that a company does not show a very large net worth or have a big showing in fixed assets, the earnings will reflect efficient or inefficient operations in the use of limited capital, provided an operating statement may be obtained. This statement will show the volume of business, the profits and the distributions of expense which is taken out of the business for operation, showing what is left to accumulate to surplus. Whenever possible it is desirable to have two consecutive years comparison as this will very clearly indicate the trend of operations for the company.

It is quite essential that adequate insurance be carried; especially in a business with a small capital doing a large volume of profitable business, it is generally advisable to carry "Use and Occupancy" Insurance.

The size of the concern and the volume of products purchased make a great deal of difference how much further a credit department will go in analyzing a business. Very few oil companies sell a volume of products to any company that is not thoroughly established, so the analysis into the various ratios is not warranted.

Up to the point of setting a credit limit, all companies in the oil industry can very easily have a standard procedure; but when the time comes to analyze the information in hand then the policy of the selling company or the individuality of the credit department manager takes hold.

PEORIA, ILL.—All of the 16 service stations of the Standard Oil Co. of Indiana at Peoria were decorated for the holiday season. The largest Christmas tree was at the all-night station. A Christmas party was given by the Standard employees at this tree for needy children in the neighborhood of the plant.

Bloomfield Mesa Field Yields 64° Be. Oil

(Continued from page 52)

2 and the West Coast Oil Co.'s well No. 1. The Leidecker No. 2, just a few hundred feet away, found neither oil nor gas at the horizon of the bed from which these wells produced. Similarly in sec. 21 the Gibson Oil Co.'s well No. 1 (No. 10 on the map) obtained a yield of about 2½ barrels a day, but wells Nos. 2 and 3 (map Nos. 11 and 112) found nothing. In secs. 15 and 16 the Bloomfield Oil & Gas Co. found oil in wells 2, 3 and 4 and gas in Nos. 5, 6 and 7. Well No. 5 produced about 2,000,000 cubic feet of dry gas a day when brought in, and well No. 6 was capable of producing 200,000 to 300,000 cubic feet of gas, which would yield, according to a field test, about 3 pints of gasoline per 1000 cubic feet.

No test has yet been made of the Pictured Cliffs and Cliff House sandstones, which, from stratigraphic information obtained at the outcrop along San Juan River and from logs of wells in the Bloomfield Mesa field, may be expected at depths of about 1400 and 2200 feet respectively. However, if, as appears probable, there is no definite anticlinal structure in this area this absence of favorable structure may have prevented the accumulation of commercially valuable pools of oil or gas in these less lenticular deeper sands.

Descriptive Trade Mark Is Disallowed

WASHINGTON, Jan. 18.—In a decision recently handed down by the Commissioner of Patents in the case of a gasoline distributor who sought an exclusive trademark on "Sealed Gasoline," it was held that the word "sealed" was used in a descriptive manner to define a characteristic or condition of the goods and that it could not be registered as an exclusive trademark. Further, that anyone who incloses goods in a sealed wrapper or container may appropriately refer to those goods as sealed goods, according to John J. Riley, legal adviser on trade marks at Washington.

It was pointed out by the Commissioner that no one could appropriate as a trademark a generic name or one descriptive of any article of trade, its qualities, ingredients or characteristics, or any sign, word or symbol which, from the nature of the facts it is used to signify, others may employ with equal right for the same purpose.

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Oil Industry Now Entering Upon Era of Wide Use of Electric Power

By H. E. Dralle,

General Engineer, Westinghouse Electric & Manufacturing Co.

THE 1923 meeting of the A. P. I. was addressed by W. G. Taylor, of the General Electric Co., on the subject of using electric power in the oil industry. Mr. Dralle, of the Westinghouse, spoke at the meeting now in session in Los Angeles, discussing the trend of the industry in electrification.

Mr. Dralle says that the oil industry is not more than 5 per cent electrified, speaking of all the possible uses that may be made of this form of power. He tells why drilling by electric power has lagged behind most other uses that may be made of current.

The trend is toward the purchase of power rather than the building of oil company owned power generating plants, Mr. Dralle says.—Editor.

THE oil industry growing within the last few decades from a position of slight prominence to one of the foremost in the world has always shown a desire to adopt new ideas or improved methods, which would effect economies in placing finished products on the market. While some of these developments and improvements may, on the surface, appear to have been long delayed much credit is due those in authority for employing the best available equipment for their ever changing conditions. Of the many opportunities afforded by the industry for increased operating efficiency, none is perhaps more far-reaching in its scope and possibilities than the one item of electrification.

That there has not been a more rapid and general adoption of electric drive throughout the industry is not so much due to the failure to appreciate its many advantages as to lack of an economic and dependable source of power supply.

One of the first and most apparent uses for electricity in the industry was that of rig lighting. Electricity with its many attendant advantages not only furnished more and better illumination than was obtainable with the oil lamp but greatly reduced the fire hazard and generally increased the efficiency of the operators as would be expected of an adequate lighting system.

From the electric lighting of rigs it was a small step, where power was available, to apply motors to pumping, the simplest of major oil field operations. The first application of alternating current electric drive to this class of service was made by the South Penn Oil Co. in the Appalachian field near Folsom, W. Va., over 20 years ago. These motors were of the squirrel cage type rated at 5/10 HP. and were capable of handling light pumping duties only. The 5 HP. connection is used for pumping and at infrequent intervals the high speed is resorted to for pulling rods and tubing and for agitating the well.

The squirrel cage motors referred to, still operating today, amply demonstrated their ability to meet the usual pumping requirements in that locality, but the necessity for high torques in pulling rods and tubing and frequent cleaning of wells in less favorable territories soon brought about the development of a so-called single speed stardelta motor designed particularly to give high operating performance for both the pumping and cleaning operations accomplished on the star and delta connections respectively. While these motors gave reasonable satisfaction, they lacked speed for performing heavy operations; consequently, to minimize the shut-down time on the wells the two-speed motor was introduced.

The first two-speed wound rotor pumping motors to find a wide field of application were rated 15/30 HP., 600/1200 RPM. and especially designed to give high efficiency and power factor on the low speed or pumping side and high thermal, as well as pulling capacity on the high speed side for performing operations about the well other than pumping.

Widely varying conditions in different localities demanded motors of the same general operating characteristics but of different ratings. As a consequence, the 15/35 and other ratings added were the 10/25 HP. for light fields and the 20/50 and 25/65 HP. ratings for the deeper territories. This type of motor is particularly applicable on pumping wells which require frequent pulling of rods and tubing and heavy cleaning and swabbing operations.

To equip a lease with this type of motor in preference to using small squirrel cage motors for pumping and portable rigs for cleaning will cost considerably more initially, but increased production obtained by having each well a complete independent unit can be easily capitalized against the increased cost of installation and from this the proper electrification program followed.

With squirrel cage motors the efficiency and power factor will be inherently higher on account of the higher speed of operation and the fact that the motors will operate more fully loaded; however, the objections to portable pulling and cleaning equipments, essential when squirrel cage motors are used, often more than offset the features favorable to the squirrel cage type of drive.

Reduction Gear Pumping

One of the greatest factors affecting the future type of pumping equipment is the reduction gear, produced originally to replace the countershaft and one belt. However, it has been developed and perfected to such a degree that its influence upon present accepted methods of oil well pumping has been almost revolutionary. The employment of gears has made possible not only the use of high-speed prime movers, including the multiple cylinder gas engines of the industrial truck type, but also the substitution of efficient drives on pump, hoist drum and sand reel for the inefficient, troublesome, and power-consuming bandwheel, bull wheels, and friction-driven sand reels.

The most modern reduction gears are arranged so that different set of gears and pinions can be easily replaced to produce different number of strokes on

the pump, a feature which avoids operating the motors inefficiently with resistance in the secondary circuit. The sprockets between the gears and hoist drum can be made of suitable ratio to allow maximum desirable speeds for pulling the rods and tubing. Adoption of this type of gear will doubtless again revive interest in the use of single speed, wound rotor motors for pumping service, to replace present two-speed motors.

Every field presents problems that must be solved with a full kowledge of local working conditions, but regardless of the methods of pumping employed (beam, jack, powers, compressed air, etc.) the electric motor affords advantages that cannot be overlooked where an adequate and dependable source of power is available. It has been conservatively estimated that in a given period 10 per cent more oil will be obtained from wells pumped by motors than by any other method. This is due to the steady and continuous motor operating characteristics which result in less attendance, minimum shut-down periods, decreased maintenance of rigs, less rod troubles and consequently longer life to equipment. These conditions will be directly reflected in the cost per barrel of oil pumped. Dependent upon power costs in different localities, savings by pumping electrically may reasonably vary from 3c to 8c per barrel over other methods.

Why Electric Drilling Lagged

In addition to well pumping, electricity was readily applied to the field water supply and distribution pumps, oil gathering pumps, salt water disposal pumps, compressor plants, vacuum pumps, machine pipe straightening, cutting and threading machines, as well as to other miscellaneous uses, and finally to drilling. It is not surprising that drilling should be the last of the field operations to be performed electrically. Not only were there difficulties in application which had to be avoided but there were also certain standards of operating performance set by steam drives that had to be equalled or excelled before serious consideration could be given to electric drive. This is true for both cable tool and rotary drilling.

One of the greatest obstacles to a more widespread adoption of electric drive, particularly in rotary drilling, is the possibility of failure of the power supply, with consequent unavoidable results which often prove disastrous. The hazards connected with power failure are too well known to require further discussion. Although the use of steam does not entirely eliminate such hazards it does have a tendency to limit them. Power supply companies realizing the importance of continuity of service are daily increasing the insurance against total power failures for objectionable periods of time. The reliability of present-day power supply is too often unappreciated.

Mechanical features of operation no longer present potential objections to electric drive since adjustable speed motors, control, and reduction gears have been developed to meet all requirements of rotary drilling. The motors are rated at 75, 100 and 125 h.p., 10 pole, and are designed to operate on either 50 or 60 cycles.

There has been developed within the last three years a rotary drilling equipment known as the Hild Universal drive. Except to say that this is positively the last word in rotary drilling equipment nothing more need be said here since there is a paper following which treats this subject alone.

Concomitant with the development of drilling motors was the application of motors to slush pump drive. Originally, slush pump motors were belt driven, as this was the simplest method of connecting the motor and pump and there were the added advantages in this arrangement that the motors were removed from the derrick floor and at heavy loads belt slippage served as a safety factor to prevent excess pump pressures. Belt slippage is not a very positive protection for the mud pump; consequently, with the introduction of safety pressure valves the necessity for belt drive disappeared and geared pumps were introduced. The many desirable features of geared pumps will assure their continued use. Common ratings for this service are 50 and 75 h.p. motors, either 6 or 8 pole, 50 and 60 cycles, with the operating advantages in favor of the higher speed equipment.

Although speed, power, and flexibility are inherent attributes of motor drive, the question of economy of operation is the outstanding feature. The cost per foot of drilling electrically is approximately one-third that of steam on the basis of power at 2c. per kilowatt hour and fuel oil at $1.50 per barrel. Other basic costs of power and fuel oil will affect the comparative energy costs proportionately.

Cable Tool Drilling Motors

For cable tool work the development of a successful drive involved an electric motor and control designed to give motion for drilling, power and high speed for pulling tools, bailing, and setting casing, and slow speeds for ramming bits; in other words, it had to possess all the flexibility of a steam engine drive. Two classes of equipments to meet these conditions are in general service, twin motor and single motor.

The twin motor equipment comprises two standard 15-35 H.P. pumping motors connected to the same countershaft with control arranged for operation from the headache post. On shallow wells the low speed slide, is used for drilling and the high speed slide for pulling tools, bailing, setting casing, swabbing, pulling casing and other heavy operations about the well. With the motors on the low speed connection set on the first point of the control, ideal speeds are obtained for ramming bits. The twin motor arrangement presents the advantage of being able to move one motor and control to the next drilling location and leave the other in place for pumping operations. The set-up is made to give 45 points of speed adjustment on both the high and low speed connection. The pole changes are rigidly fastened together, making it impossible to operate the two motors on different speed connections. By means of the headache post controllers both motors are brought to the first point of the control together and from then on the two controls can be operated independently and placed on any point to give the close speed adjustment desired. When stopping and running in the reserve direction the headache post controller operates both motors together.

Power Saving by Use of Twin Motors

In fields where drilling can be accomplished on the low speed side of the twin motors, there will obviously be a power saving over a single motor equipment, and on account of the higher speeds obtainable, better time can be made bailing, hoisting and setting casing. A single motor equipment comprising a 75 horsepower, 8 pole, wound rotor motor and control designed to produce operating characteristics similar to other types of drive has the advantage of twin motors in simplicity of installation. Where it is not advantageous to leave one motor on the well for pumping at the completion of drilling, the advantages of twin motor equipment are somewhat less pronounced. Savings by using electric drive are at least as attractive in this type of drilling as for rotary, and therefore, expansion in motor drive will be limited only by the availability of power.

Foreign operators are making comparatively greater progress than domestic producers in oil fields electrification. This doubtless is a result of local fields conditions as well as economic pressure. Even so, they are deserving of much credit for initiative and foresight in employing the producing means which will enable them to compete profitably in the markets of the world. What more convincing proof could there be for the success of electrification?

The foreign engineers were quick to adopt protected type equipment for drill-

ing in gaseous fields. The motors as supplied have their only arcing parts, the slip rings, enclosed in a steel gas-proof housing. The control has all live parts oil immersed. To my knowledge, no oil-immersed control has been installed in this country but many protected type motors have been marketed. In cases where protected motors are used, it is customary to place the open control in a separate house remote from the derrick, in order to insure safety.

That the electrification idea has not advanced more rapidly is fundamentally due to two causes—failure of the oil companies to appreciate the possible economies effected by its use and an apparent disinclination on the part of the power companies to solicit oil field load, feeling perhaps that the returns from desirable available load were not commensurate with the service demanded. In other words, the demands for power from oil companies were limited and that supplied was usually at a rate sufficiently high to discourage further adoption of electric drive. Within the past several years, however, central stations have come to appreciate the character, extent and desirability of the oil field load and as a result have made rates more attractive to operators. Likewise the oil companies have become sufficiently converted to the idea of electrification to build their own power plants in cases where central station power was not available at a reasonable figure, usually determined by the investment in additional lines necessary to reach any particular location.

It is only in very unusual conditions too well known to require further elaboration here, where purchased power is not to be desired over an independent generating plant for all oil field operations. Now that the public utilities are realizing the desirability of oil field load, they are rapidly extending lines, revising rates, and increasing the dependability of service, in order to build up this class of loads, an unprecedented growth of electrical development may be expected, as there is not a single operation in the field to which electricity can not readily be applied.

Possibilities in Refineries

Applications of electric drive in the refinery are not unlike those of pipe line stations as far as general types of equipment are concerned. Refineries, however, do differ from pipe line stations in the independence which they can assert in obtaining cheap electric power where central station power is not available at reasonable rates. This is particularly true of the larger refineries where the relation between the enormous demands for process steam and power are unusually favorable for the generation of by-product power by means of non-condensing or bleeding turbines. Furthermore, large amounts of feed water must be heated and when this is done efficiently, according to the most modern methods, another source of by-product is provided. Feed heater turbines designed for economical feed water heating should generate 1200-1500 Kw. addition of by-product power for each 30,000 lbs. feed water heated.

Some refineries are generating by-product power today principally by the use of non-condensing and bleeder turbines taking steam from the boilers at pressures around 150 lbs. and delivering process steam at pressures around 20 lbs. per square inch gauge. The amount of power being generated in this way, however, is only a small part of that which is available as a by-product.

The conservation of capital represented in existing equipment such as steam mains, boilers, and auxiliary equipment is an important factor influencing progress towards a fuller use of by-product power in oil refineries. Existing steam mains cannot always be replaced profitably by larger ones to accommodate the increased volume of steam at reduced transmission pressures, and the motorization of auxiliaries which should be viewed as a normal progressive development essential for high operating economy cannot be fully accomplished by a single immediate effort.

Advantage of Higher Pressures

A demand for steam at prevailing pressures of 100 to 125 lbs. gauge, therefore, will continue, which suggests that refineries using steam of this range of pressure in sufficient quantity to warrant the use of high back pressure non-condensing or bleeder turbines would find some advantage in the adoption of higher pressures than are now generally used in refineries. These pressures which might well be 350 lbs. per sq. in. or higher, can then be reduced to the prevailing line pressures by expanding the high pressure steam through a non-condensing or bleeder turbine. Steam so expanded will generate cheap by-product power. It must be evident that enormous amounts may be generated by expanding to as low pressures as possible consistent with the refinery layout and practices.

When new boilers are required because of needed extensions to the boiler room capacity or obsolescence of boilers, the investment charges against a power station generating by-product power from high pressure steam should be less than those against a condensing power station of equal capacity. The use of high steam pressure and high back pressure turbines should, therefore, be exceptionally attractive to expanding refineries which thereby obtain an additional source of cheap by-product power without modifications of existing steam distributing mains or auxiliary units.

In general, by-product power will be found the cheapest available to oil refineries. Since all of the steam used by the generating units is delivered to process uses, the steam charge for power is small, usually not more than one-fourth of the charge for a condensing power plant. Operating charges in the generating room should also be less than those of a condensing plant as the condenser is either largely reduced in size or entirely eliminated. A full development of by-product power generation would encourage economy by accelerating the electrification of pumps and auxiliaries. Furthermore with very cheap power there will be found for electricity uses that are not now economically feasible. Electrical heating of pressure stills requiring accurate temperature control to increase the quality of product, and paraffine sweaters, as well as other industrial heating uses will automatically suggest themselves with the advent of a cheap power source.

Arc-Welding for Repairs

A consideration of the trend of electrification in the oil industry would be incomplete without the mention of arc-welding, an agent which has affected so many substantial economies where it has been tried. Storage tanks presented one of the first and most obvious uses for electric welding, but within the last few years enormous strides have been made in applying it to pipe lines and refinery construction, as well as to general repairs in all branches of the industry. What actual progress awaits in the application of welding in the oil industry is a matter of conjecture, but if results in the past few years may be taken as a criterion, or even an indication, we can expect exceptional developments within the next five or ten years.

By comparison alone with other industries which have been electrified within the past decade, it would be safe to predict a widespread adoption of electricity in all of the ramifications of the oil industry, at present not over 5% electrified. However, with the existing bond evidences of the many practical, flexible, and economical applications of electrical power, and the favorable recognition given it by the central station, the most conservative cannot help but view most optimistically the possibilities in this great industry of the increased use of this economic agent—Electricity.

TULSA, OKLA.—R. N. Lambert, manager of the Tulsa office of W. H. Barber & Co., and family this week occupied their recently completed bungalow in the southeastern section of the city.

Wisconsin Jobbers Stage Lively Meet At Mid-Winter Frolic

By Ward K. Halbert
N. P. N. Staff Writer

MILWAUKEE, Jan. 19.—WINTER FROLIC is the name applied to the extraordinary meeting of the Wisconsin Independent Oil Jobbers' Association which was held Jan. 11 and 12 at the Pfister Hotel here, and the name was apropos. It was not the short business session Wisconsin jobbers usually hold. It was a full two-day program interspersed with pleasurable entertainment and an equipment show in which 28 exhibitors took part. The program was carried out much as it was planned with nine educational or business addresses.

Milwaukee Tank Works treated the registrants to lunch both days, and there were more than 200 persons registered, of whom more than half were Wisconsin jobbers. President F. H. Mayfield of the association presided at a banquet Monday night at the Wisconsin Club which would do credit to any convention. The cost of this elaborate feed was included in the nominal registration fee. Eighteen acts of variety entertainers were supplied by a pooled contribution of the exhibitors and the Lindsay-McMillan Co.'s orchestra made music for the dance which followed and lasted until midnight.

In Re Gasoline Tax

After Daniel W. Hoan, Mayor of Milwaukee, delivered the address of welcome on Monday afternoon, F. C. Cannon, secretary of the Wisconsin Good Roads Association, spoke to the oil men. His talk was in defense of the 2-cent gasoline tax in the state. He did not advocate further taxation of motor vehicles but explained the necessity of the gasoline tax as it stands.

Under the constitutional provisions of the state of Wisconsin it is almost impossible to vote a popular debt. In order for Wisconsin to issue bonds it is necessary that a bill be passed by two successive legislatures and then approved by popular referendum; a job which is not only difficult but impossible within five years time. In short, money for road purposes must be raised some other way. His further remarks told how the state was in need of roads and enjoying business prosperity as a result of the roads already built.

Following Mr. Cannon, Don Montgomery of the state department of markets read a paper. "Unfair Competition" was the subject of Mr. Montgomery's talk. In it he dealt with the subject in general terms, illustrating with incidents and circumstances local to Wisconsin. It was Mr. Montgomery's department, headed by Edward Nordham, commissioner of markets, that issued the famous "General Order 23" about a year ago. This order has the weight of a state law and prohibts secret gasoline prices in Wisconsin. No gasoline price in Wisconsin is illegal but a secret price. With few exceptions the oil men in Wisconsin have been strong for this ruling and have co-operated with the department in its enforcement.

The closing address of the day was by Raymond Shaw, director of publicity for the National Petroleum Marketers Association. With the help of a slide projector, Mr. Shaw showed the oil men all the helps and discussed some of the advantages of membership in the Independent Oil Men of America. His talk was enthusiastically received for the N. P. M. A. is especially strong in Wisconsin and many of the jobbers here are participants in the I. O. M. A. advertising program. It was in the process of this talk that Mr. Shaw introduced Red Hat Motor Oils publicly.

The mutual poster campaign of the Wisconsin state association was discussed by N. C. Beerend, chairman of the committee. The state group has discontinued newspaper advertising with their mutual campaign for 1926, whereas last year the institutional copy ran in practically every important newspaper in the state. "Independent oil" will be advertised this year, however, on about the same number of poster panels as in 1925. Mr. Beerend said that money for the campaign was absolutely assured and that sites for poster panels were already being selected.

MILWAUKEE, Jan. 19 George Lang, about 65 years old, a partner in the oil jobbing firm of Lang & Scharman at Marshfield, Wis., died suddenly in the lobby of the Pfister Hotel here on Jan. 12. Mr. Lang had come to Milwaukee to attend the meeting of the state jobbers' association. The meeting was over and Mr. Lang had checked out of the hotel, paid his bill at the desk and started for the door as if to take a cab to the train which would take him home. Before he reached the door he fell and was picked up unconscious, from which condition he never recovered. This was the one sad occurrence at the Winter Convention of the Wisconsin oil men. Relatives were notified by wire and Mr. Lang's body was sent to Marshfield for burial.

The 1926 poster advertising appropriation is $4,370.50, of which every cent is to advertise the emblem of independence that the whole group displays at their stations. No imprint of company advertising will appear on any of this. To supply the funds for this appropriation, the participants are assessed according to their gallonage, figured on the state oil inspector's annual report. Each member of the advertising group pays 50 cents per car (figuring 8000-gallon cars) on all gasoline bought in 1925.

L. V. Nicholas, president of the N. P. M. A. and J. L. Murray, head of the organization's marketing department, occupied the forenoon meeting on Tuesday. Together they outlined the plans and facilities of the national organization. Mr. Murray was not scheduled on the program but Mr. Nicholas was assigned a talk on the subject of "Looking Forward." In driving home the business-getting power of a nationally adopted emblem, Mr. Nicholas said; "What kind of a taxicab do you ride in in Milwaukee or Chicago when you come into the city from some other town, if you live somewhere else? Unless you are a rare exception you use a cab of the same color scheme that you use at home. That is why people who use Red Hat products 10 months in the year at home will keep using them in the summer while they are on their two months tour."

Three Learned Talks

The Tuesday afternoon addresses were three in number and were remarkable for their eloquence. O. L. Kowalke of the University of Wisconsin at Madison, discussed elementary oil chemistry. It was 45 minutes of interesting statistics, mostly having bearing upon the refining branch of the industry. Judge A. C. Backus, Milwaukee, of juvenile court fame, talked about taxation after Prof. Kowalke had finished. In substance Judge Backus championed the cause of industry in Wisconsin against the burdensome taxes aimed at corporations and rich individuals. "Even with its high inheritance tax rate Wisconsin collects comparatively little inheritance tax" he said, "because there are other states where the inheritance tax is less and no well-to-do man can afford to die in Wisconsin."

The last man on the program was F. J. Cunningham, advertising manager of the La Salle Extension University. He discussed sales problems and methods of sales management in such an interesting way that a large assembly of oil men remained in the hall until late afternoon, some of them postponing the start of their homeward journeys.

Wildcat Showings of Interest in Oklahoma As Old Fields Decline

By A. F. Hinton
N. P. N. Staff Writer

TULSA, Jan. 18

AS EACH succeeding week passes with no outstanding discovery which might lead to the development of a new field, without which apparently Oklahoma's production is destined to continue on its present downward course indefinitely, wildcats reporting oil showings are regarded with much interest. It is through the wildcat discovery that new fields must come, except, of course, through discovery of deeper producing sands in fields already developed at shallower depths. This is practically the same as the discovery of a new field, except that it does not occur in wildcat territory, which had not been productive before the discovery.

In recent weeks, the Magnolia discovery of the Wilcox sand at Wewoka has been the most important new development, while wildcat wells showing up as though they would finally make oil wells have been few in number. The most outstanding of these is still the Morgan & Flynn well near Earlsboro, western Seminole county, 20 miles or more from production, which now looks like a 250-barrel well. This has been followed by another discovery in the same county, two townships south and one east of the Earlsboro well.

The Earlsboro well is in 10-9-5, along the western edge of the county, while the more recent discovery, known as the Bryan, Emery, Nillsson, and Carter Oil Co. No. 1 Walker, is in 4-7-6, about 10 miles west of Wewoka. This well is in a sand topped at 2752 feet and about four feet in, from which it filled the hole with what is reported as 40.5 gravity oil. After having set a six-inch liner to within 14 feet of bottom, the well was swabbed and thereafter flowed about 100 barrels. It has been showing only a comparatively small amount of gas, estimated at 250,000 cubic feet.

This well is about seven miles southeast of Maud, Pottawatomie county, where the Magnolia Petroleum Co. has small production in the Hunton lime, and which is the nearest production. It is 10 miles from the Wewoka field, and about the same distance north of the T. B. Slick No. 1 Mingo, in 25-6-6, which is a gas well. The nearest drilling well is that of the Superior Oil Corp. in the NE of 31-8-6, three miles away to the north and west.

This well is in the same situation that all wildcat discoveries are pending final completion, as it cannot be told whether or not it will constitute an important development until it has been completed. It is just an interesting showing at present, and if it is completed for a commercial well, will be followed by more drilling in the vicinity. Acreage around the well is owned by the Empire, Mid-Continent Petroleum Corp., Prairie Oil & Gas Co. and some in the hands of individuals.

Earlsboro Well 250 Barrels

The Morgan & Flynn well near Earlsboro has been deepened, until it is now 11 feet in the sand, which was topped at 3560 feet, and which is described by some geologists as the Boggy sand. The deepening resulted in a considerable increase in the gas, and it has been flowing by heads since present total depth was reached, making as much as 17 barrels in one hour, or at the rate of 408 barrels daily. Agitation resulting from running the tools into the hole also caused it to make a considerable flow. Apparently the well is good for about 250 barrels daily, and as such is a worthwhile discovery.

Two locations offsetting the Morgan & Flynn well have been announced. One of these was made by the Texas Co., and is a diagonal northwest offset, in the SEc NW of 10-9-5. Another location was made by the Independent Oil & Gas Co. for a direct north offset, in the SWc NE of the same section. The Morgan & Flynn well is in the NWc SE of 10.

One of the interesting features of the weeks' developments was the finding of big production in the Layton sand at Garber, in the Roxana Petroleum Corp. No. 11-W Schroeder, in the NWc SE SW of 18-22-3W. This well got the Layton from 3617 to 3639 feet and started off flowing 50 barrels an hour. It is now making about 1085 barrels daily, and constitutes about a fourth of the company's production from all sands on the lease.

This is by far the best Layton sand well yet completed in the field, other tests for this horizon having been comparatively small pumpers or failures. The sand was discovered by the Prairie Oil & Gas Co. on its Wishard farm north of the deep sand production and made a fair well, but has been found practically non-productive by the Sinclair Oil & Gas Co. on its Hartley farm, which produced one of the largest wells ever drilled in Oklahoma in the Wilcox sand.

Garber production from all sands has dwindled until it is now around 25,400 barrels. It showed a decline of 3600 barrels during the past week. About 4500 barrels of the total production is coming from the old shallow sands, the remainder being from the recently discovered sands at 2600 feet, the Layton and the Wilcox and Siliceous lime. Most of the deep wells are making large quantities of water, making them difficult to swab and practically impossible to pump. Artificial respiration is being tried by at least one company in the form of introducing high-pressure residue gas on the sand, as has been done with some success at Tonkawa, but with inconclusive results so far. However, the deep sands have produced about 6

Drilling Operations in Oklahoma, Kansas and North Texas, Jan. 16

	Jan. 16 Loc.	Rigs.	Week Ending Drg.	S.D.	Total	Jan. 9 Loc.	Rigs.	Drg.	S.D.	Total
OKLAHOMA										
Burbank	...	2	8	2	12	...	4	7	2	13
Other Osage	2	11	35	10	58	1	11	29	20	61
Bristow-Cushing	21	40	169	39	269	21	41	154	33	249
North Oklahoma	18	29	125	103	275	19	24	134	98	275
South Oklahoma	20	16	136	47	219	22	22	152	72	268
Muskogee	...	11	51	11	73	...	16	45	18	79
Okmulgee-Bristow	3	41	106	40	190	3	40	89	70	202
Tonkawa	...	...	10	2	12	...	...	11	2	13
Wewoka-Cromwell	8	13	111	27	159	9	15	104	17	145
Total Oklahoma	72	163	751	281	1267	75	173	725	332	1305
KANSAS	68	86	207	154	515	67	84	173	173	497
NORTH TEXAS										
Eastland County	...	...	20	30	50	...	...	41	9	50
Stephens County	...	15	32	11	58	...	12	38	9	59
Texas Panhandle	...	20	43	17	80	...	18	45	13	76
Mexia District	...	2	6	...	8	...	1	6	1	8
E. Texas Wildcats	...	3	8	13	24	...	4	6	14	24
W. Texas Wildcats	...	26	109	97	232	...	28	125	74	227
Wichita Falls	...	56	165	47	268	...	90	165	54	309
Total N. Texas	...	122	383	215	720	...	153	426	174	753
GRAND TOTAL	140	371	1341	650	2502	142	410	1324	679	2555

Completions in Oklahoma and Kansas, Week Ended Jan. 16

Company	Well No.	Location	Depth	Initial Production
OKLAHOMA				
Carter County				
Carter	1	C NW SW SW 22-2-3W	2126–2210	75
Coline	3	C SE SE SW 6-2-2W	1690–1723	127
Truman	7	C NW SW NW 30-2-2W	1993–2668	50
Schermerhorn et al.	3	C SE NW NE 8-3-2W	2477–2307	175
Humble	18	SEc NW NW SW 9-4-2W	2121–2125	10
Amerada	11	NWc SE SE NW 28-5-1E	1202–1216	125
Magnolia	1	C NE NE NW 1-3-2W	T.D.3760	Dry
Humble	1	C NW NE SE 22-4-1W	T.D.3090	Dry
Comanche County				
Cochran et al.	1	SEc NW 16-3-10W	T.D.1104	Dry
Consolidated	1	NWc 27-1-10W	T.D.2112	Dry
Creek County				
Transcontinental	3	SEc NW SW 13-17-8	2248–2279	10
Atlantic	5	CNL SW SE 14-17-8	2240–2265	30
Sherman et al.	2	CEL NE SE 19-17-10	2097–2154	15
Pioneer	5	NWc SW NE 24-17-10	1839–1890	30
Atlantic	1	NWc NE SE 3-18-11E	T.D.2504	Dry
Anderson	1	SEc NE SE 18-18-11	T.D.2648	Dry
Chronic et al.	1-A	SWc 7-18-12	T.D.2317	Dry
Dixie	1	SEc 1-17-9	T.D.3095	Dry
Amerada	2	NWc SW NE 19-17-10	T.D.1044	Dry
Sherry et al.	1	NWc SE SE 1-16-10	T.D.2966	Dry
Garfield County—Garber				
Carter	55	C NE SE NW 24-22-4W	T.D.4513	450
Sinclair	6	C NE NE SE 36-22-4W	2211–2231	50
Sinclair	15	SWc SE SW NE 36-22-3W	2150–2169	35
Sinclair	24	C SE NW NW 19-22-3W	4125–4385	1380
People et al.	1	NWc SW SW 20-22-3	1696–1700	10
Garvin County				
Texas	9	SWc NE 17-1-3W	1715–1737	50
Texas	10	NEc SE NE 17-1-3W	1652–1685	75
Grady County				
Little Nick	2	C NW NW 35-5-8W	2160–2500	8M
Garvin	1	SWc SE SE SW 35-3-5W	1475–1486	75
Hughes County				
Braden-McClure	1	SWc NW NE 17-9-9E	3040–3050	50
Independent	1	SEc NW 24-8-10E	3481–3515	2M
Jefferson County—Seay				
Carter	1	SEc NW NE 33-6-5W	1437–1438	1800
Humble-Hambro	4	NWc SW NW 34-6-5W	1743–1748	12
Kay County—N. Braman				
Comar	3	NWc SW SE 5-28-1W	2355–2401	137
Comar	1	NWc SW NE 5-28-1W	2405–2406	61
Mid-Cont	1	NEc SE NW NW	3637–3638	25
Kay County—Blackwell				
Blackwell	1	SEc 5-27-1W	3454–3459	80
Texas	1	C SW NW 9-27-1W	3426–3437	35M
Kay County—Hubbard				
Marland	5	C NW SW NE 1-26-2W	2960–2984	30
Marland	4	C SE NE NW 12-26-2W	2955–2974	235
Kay County—Tonkawa				
Wentz	8	CSL SE 28-25-1W	4268–4280	1091
Kay County				
Mid-Cont	1	SEc NE NE 36-27-1E	T.D.2560	Dry
Kay County—Thomas				
Carter	1	NWc NE 16-25-2W	T.D.1835	Dry
Le Flore County				
LeFlore	1	SEc NW SE SW 8-9-25E	T.D.3419	Dry
Lincoln County				
Schriver	1	NWc SW 7-14-4	T.D.3962	Dry
Lincoln County—Davenport				
Texas	2	SWc NW SE 2-14-5	3292–3364	600
Amerada	3	C NE NW SW 3-14-5	3430–3468	525
Amerada	4	NWc SW 3-14-5	3422–3465	685
Prairie	13	C NW SW NW 3-14-5E	3420–3465	135
McCurtain County				
O'Shaughnessy et al.	1	SEc NE SE 12-1-26E	T.D.1760	Dry
Muskogee County				
Harsha	2	NEc SE NW 35-15-16	T.D.1778	Dry
Foltz	1	CEL SE SW 28-15-17	1378–1410	1½M
Okfuskee County				
Josey	1	SWc NE NW 33-12-11	3548–3550	500
McMan	1	SEc SW 36-11-9	2932–2969 OWD	2M
Blakely	2	SWc SE SE 10-11-11E	2920–2930	Dry
Okmulgee County				
Sheldon et al.	1	SEc NE SE 19-16-12	2573–2578	2M
Mickelson	7	NWc SE SW 20-15-12	1031–1080	1½M
Phillips	1	NEc SE 22-15-12	2133–2160	50
Noble	1	SWc NW 23-15-12	2143–2155	30
Barbara	2	NWc NE NW 35-15-12	1845–1861	22M
Halley	2	SWc SE NE 32-13-12	2318–2327	6M
Magnolia	3	NWc SE 4-12-12	2475–2506	50
Moffitt et al.	3	SEc NW NE 36-11-9E	2232–2252	10
Callahan et al.	1-A	NEc SE SW 15-13-14	2445–2450	165
Tidal	7	NWc SE NW 1-11-13	2832–2858	40
Selby	14	SEc NW NE 26-14-14	514– 526	1M
Lyons	1	NWc NE NE 18-15-13	2610–2614	60
Misener et al.	5	CSL SE SE 32-15-11	T.D.2990	Dry
Tribes	4	NWc SE SW 31-12-11	T.D.3355 OWD	Dry
Murta et al.	1	SWc NW SW 4-15-13E	T.D.2643	Dry
Gardner	4	NEc SW 40-13-14	T.D.2605	Dry
Osage County				
Kennedy	1	NWc SW 14-29-10	1133–1150	15
Duffield-Howard	1	SEc NE SW 28-28-11E	976–1036	25
Owen Osage	358	CEL NW NE SW 8-27-11E	703– 720	8M
Moore et al.	5	SWc NW SW SW 11-21-9E	2210–2226	35
Devonian	1	NWc NE NW NW 30-21-10	2111–2118	15
Breene-Holm	1	SWc NW 28-20-10	2228–2238	20
Lewis	1	NEc SE NE NE 18-29-6E	T.D.2840	Dry
I. T. I. O.	1	NWc SE 36-25-6E	T.D.3227	Dry
Marland	4	NWc SE NW SW 15-24-8E	T.D. 475	Dry
Breene et al.	15	NEc SW NW 23-21-10E	T.D.2356	Dry
Osage—Burbank				
Carter	15	SEc 16-26-6E	2925–2995	75
Pottawatamie County				
Pierce	1	NWc 25-10-4E	T.D. 460	Dry
Stephens County				
Carter	1	CNL NW SE 2-2-5W	1505–1507	6
Pauline et al.	4	SWc SE NE 2-2-5W	1504–1510	90
Carter-Knox	5	SWc NE 2-2-5W	1790–1797	15
Big 12	4	CWL SE SW 27-1-8W	1679–1687	4½M
Crump-Beard	4	NWc NE NE SW 32-1-8W	1986–1992	75
Amerada	3	SWc NE NE 32-1-8W	2255–2268 OWD	60
Commercial	5	C SE NW SW 12-2-8W	1517–1531	60
Law-Kinsey	1	NWc SW NW SW 31-1-8W	T.D.2391	Dry
Magnolia	1	NWc 28-1-9W	T.D.2260 OWD	Dry
Tulsa County				
Elliott et al.	1	CEL NE SW 9-18-13E	1525–1573	1M
Black et al.	10	CWL SE NW 17-17-13	T.D.1895	Dry
Burke-Gibbs	5	SEc SW NE 16-16-14	T.D.1736	Dry
Wagoner County				
Headley et al.	1	SEc NE 12-18-16E	T.D.1202	Dry
Robetaille	1	SEc NW SW 25-18-15E	T.D.1575	Dry
Flint Ridge	1	CEL SE NE 29-18-17E	490– 501	1M
KANSAS				
Butler County				
Empire	83	C NW 28-25-5E	649– 668	15
White Eagle et al.	1	SWc NE SW 27-26-7E	2122–2138	125
Federal	4	CNL NW SW 29-26-6E	2672–2732	100
Hoyt et al.	7	SEc NE NE 19-27-6E	2725–2740	15
Flack et al.	1	NEc SW SE 22-27-7	2711–2721 OWD	58
Empire	29	NWc NE NE 30-25-5E	T.D.2625	Dry
Federal	6	CWL W½ SW 29-26-8E	T.D.2760	Dry
Cowley County				
Trees	2	SWc NW NE 28-31-4E	T.D.3025	Dry
Roth-Faurot	1	SWc SE SW 20-31-5E	T.D.1728	Dry
Duffield et al.	1-A	NWc SW 19-32-5E	3014–3027	500
Cowley County—Graham				
Gypsy	1	SWc SE SE SW 16-33-3E	3202–3228	380
Marland	2	SEc SW NW NE 21-33-3	3224–3257	22
Elk County				
Theta	4	CWL SE SW SW 23-31-10	1304–1338	30
Greenwood County				
Theta	15	SEc NW NE 17-22-10E	2257–2294	100
Titus et al.	10	SWc SE SW NW 29-22-10	2382–2432	140
Mid-Cont	5	NWc SE SW 18-22-10	2075–2106	35
Phillips	1	NEc SE SW 18-22-11	2075–2106	35
Greenland	13	SWc SE SE 10-23-9	2303–2340	150
Roth-Faurot	2	NWc SW SW 36-25-11	582– 594	1M
Phillips	5	NWc SW SW 12-22-10	T.D.2414	Dry
Phillips	5	NWc SE NE 30-22-11	T.D.2095	Dry
Mid-Cont	7	C SW 15-23-13E	T.D.1620	Dry
Leonard	4	SEc SW 23-24-9E	T.D.2200	Dry
La Rue et al.	1	NWc SW 3-26-12E	T.D.1715	Dry
Lyons County				
Phillips	1	SWc NE 33-21-12	T.D.2457	Dry
Russell County				
Ritchey-Moore	1	SWc NE 25-12-11W	T.D.3475	Dry
Johnson	5	NWc NE NW 5-12-11W	2823–2825	200
Mid-West	6	NWc 8-12-11	2890–2898	90
Valerius	11	NWc NE 8-12-11	2935–2962	200
Woodson County				
Powell et al.	1	SEc NW 28-25-15E	T.D.1530	Dry

million barrels of oil since the Wilcox was discovered last April, so that on the whole its exploitation has been quite profitable.

Okfuskee County Pool

Amerada Petroleum Corp. drilled in its No. 10 Harjo during the past week, and it flowed 350 barrels in the first 12 hours, from the Wilcox sand topped at 3312 feet and drilled to 3359 feet. This well is located in the NEc SE NW of 13-12-11, Okfuskee county, in what is known as the North Baltimore pool, lying between Okemah and Schulter, and 16 miles southwest of Okmulgee. The well is still drilling in and it is possible the further deepening will make a better well of it.

This is the third deep sand well to be completed in the pool, with three others drilling. The Wilcox was discovered in this locality last October by the North Baltimore Oil & Gas Co., of which J. J. Moroney of Okmulgee is the head, and the Anglo-Texas Oil Co. Their first well, which is located in the SW NE of 13, made 490 barrels initial and is still flowing 300 barrels daily.

The Amerada well is a west offset to the No. 4 of the North Baltimore-Anglo-Texas group, which came in Jan. 2 with initial production of 625 barrels and still making 575 barrels at total depth of 3349

Cracked Gasoline Knoxless-Pullsmore

No longer need the refiner market his cracked gasoline under the guise of straight run gasoline For carefully checked road performances made in various cities with various gasolines are daily proving the superior anti-knock properties of cracked gasoline

This cracked gasoline, because it knocks less and pulls more, is a premium quality gasoline and is worthy a premium price over straight run

Universal Oil Products Company
Owners of the Dubbs Process
310 South Michigan Ave
Chicago, Illinois

Completions in North and Central Texas, Week Ended Jan. 16

Company	Well / Farm	Location / Survey	Depth	Initial Prod.
Archer County				
Texhoma	10-Taylor		1611–1614	25
Sibley	18-Wilmot	SP	1391–1405	30
Wichtex-Dixie	3-Jackson	Aldridge	1551–1557	65
Burns-Maxson	1-McCrory	Geraldine	1579–1582	100
Staley et al	4-Wilson	ATNC	1516–1519	15
Pandem	3-Power	ATNC	1384–1388	180
Texhoma	4-Oldham	Hubble	1310–1330	85
Texhoma	5-Oldham	Hubble	1352–1357	102
Texhoma	1-Wolfe	Hutton	1313–1339	275
Darlick	5-Darlick	TEL 1	1422–1426	28
Gulf	7-Richardson	TEL 2424	1446–1459	10
Simms	2-Richardson	TEL	1446–1454	36
Sun	7-Richardson	TEL	1441–1449	100
Trio	6-Brom	TEL	1381–1410	170
Trio	9-Brown	TEL	1380-T.S.	126
Trio	10-Brown	TEL	1412–1421	50
Eisling et al	2-Prideaux	Dorsey	669-T.D.	8
Pandem	1-Parkey	SP	T.D.1800	Dry
Texas	1-Taylor	ATNC	T.D.1851	Dry
Riner-Bailey	30-Wilson	ATNC	T.D.1660	Dry
Wilson-Empire	1-Wilson	ATNC	T.D.1650	Dry
Maer et al	3-Hutchinson	ATNC	T.D.1395	Dry
Atlantic	1-Crawford	Corzine	T.D.1450	Dry
Texhoma	2-Abercrombie	SP	T.D.1575	Dry
Gulf	5-Richardson	TEL	T.D.1461	Dry
Murchison-Fain	1-Talbott	TEL	T.D.1500	Dry
Craig-Wilson	1-Anderson	Whitaker	T.D.1100	Dry
Gulf	1-Wilburn	TEL	T.D.1446	Dry
Jones et al	4-Darlick	TEL	T.D.1425	Dry
Golding-Cochran	2-Lanster	BBB&C	T.D.1191	Dry
Baylor County				
Pet. Prod	6-Mills	TEL	T.D.1426	Dry
Pandem	1-Portwood	Luggins	T.D.1434	Dry
Pet. Prod	5-Mills	TEL	1407–1413	50
Brown County				
McCarter	1-Leatherwood	Delgado	1132–1135	5, 5M
Suddeth et al	1-Byrd	Travis	1338–1350	6
Gilman et al	2-Thompson	Smith	1226–1242	20
McLester	1-Wooldridge	ETRR	1204–1221	60
Gillman et al	4-Chambers	Smith	1204–1217	40
Conway	2-Pickett	Logan	T.D.1350	Dry
Cosden	3-Chambers	Logan	T.D.1420	Dry
Conway	2-Clarke	ETRR	T.D.1260	Dry
Infield	1-Graham	Brown	T.D.2100	Dry
Olymphia	3-Gilliam	ERRR	T.D. 702	Dry
Callahan County				
Albritton et al	1-Cent. Ad.	Knight	1452–1459	70
Jones et al	1-Cent. Ad.	Knight	1446–1453	150
Kirk Brewer	1-Cent. Ad.	Anderson	1449–1456	120
Root et al	1-Cent. Ad.	Knight	1462–1469	15
Stone-Neeb	2-Cent. Ad.	Knight	1463–1470	20
Root-Rhodes	1-Fairview	Anderson	T.D.2400	Dry
Cranfill et al	1-Cent.	Anderson	T.D.1471	Dry
Kirk-Brewer	1-Smith	Millican	T.D. 500	Dry
Brannon-Murray	1-Cent. Ad.	Knight	T.D.1470	Dry
Mogul	1-McDermott	Victoria	T.D.1100	Dry
Clay County				
Murchison-Fain	1-Halsell	Washington	T.D.3780	Dry
Cooke County				
Sun	1-Ludeman	Sparks	T.D.3334	Dry
Coleman County				
Texas	1-Hall	Haynes	T.D.2902	Dry
Eastland County				
Hoffer	1-Thurman	Barnhill	T.D.3267	Dry
Barclay et al	1-Reid	McLennon	T.D.3800	Dry
Mid-Kansas	1-Williams	McGrown	T.D.3565	Dry
Root et al	5-Gibson	H&TC	1672–1690	10
Clayton et al	2-Amis	H&TC 29	3175–3206	4½M
Woods et al	2-Collins	H&TC	864– 872	10
Root	1-Kirklin	H&TC	3281–3291	8M
Glasscock County				
Gulf	4-McDowell	TP	T.D.3902	Dry
Henderson County				
Atlantic	1-Gamble	Williams	T.D.3103	Dry
Limestone County				
Humble	4-Finch	McNulty	642–643	2M
Mitchell County				
Atlantic	2-Adams	TP	3035–3042	70
Navarro County				
Dixon et al	1-Garrett	Boren	370-T.D.	2
Sun	1-Swink	Hudson	T.D. 384	Dry
Reagan County				
Humphreys	1-Sawyer	TP	T.D.3003	Dry
Scurry County				
Milham	8-Clausell	TEL 582	T.D. 306	½M
Shackelford County				
Humble	1-McLemore	Miller	T.D.4119	Dry
Milham	1-Casey	TEL	T.D. 670	Dry
Throckmorton County				
Associated	1-Cummings	CIR	T.D.3300	Dry
Larkin et al	1-Richards	Morgan	T.D.4290	Dry
Wichita County				
Lanning	1-Riley	Redman	T.D.1362	Dry
Wilbarger County				
Humble	1-Waggoner	H&TC 47	1886–1916	250
Humble	1-Waggoner	H&TC	1870–1886	250
Landreth	5-Waggoner	H&TC	1186–1198	25
Landreth	9-Waggoner	H&TC	1874–1889	125
Milham	2-Waggoner	H&TC	2430–2450	20
Landreth	1-Waggoner	GC&SF	T.D.2152	Dry
Wise County				
Magnolia	1-Cassidy	Mixon	T.D.5859	Dry
Young County				
Bridwell et al	8-Boren	Newman	1063–1069	434
Gulf	1-Campbell	TEL	912– 913	35
Tidal	11-Campbell	TEL	908– 914	35
Tidal	13-Campbell	TEL	T.D.1427	Dry
Texas	1-Barry	TEL	1331	Dry
Christie et al	5-Keathley	TEL	T.D.1012	Dry
Craig et al	1-Lindsey	TEL 199	T.D.1107	Dry
Wolfe et al	1-Leberman	TEL	T.D.1150	Dry
Suggett et al	1-Perkins	TEL	T.D. 823	Dry
Lang et al	1-Cochran	TEL	T.D. 987	Dry
Harris	1-Simms	TEL	T.D. 850	Dry
Tex-Unity	1-Watson	TEL	T.D.1001	Dry

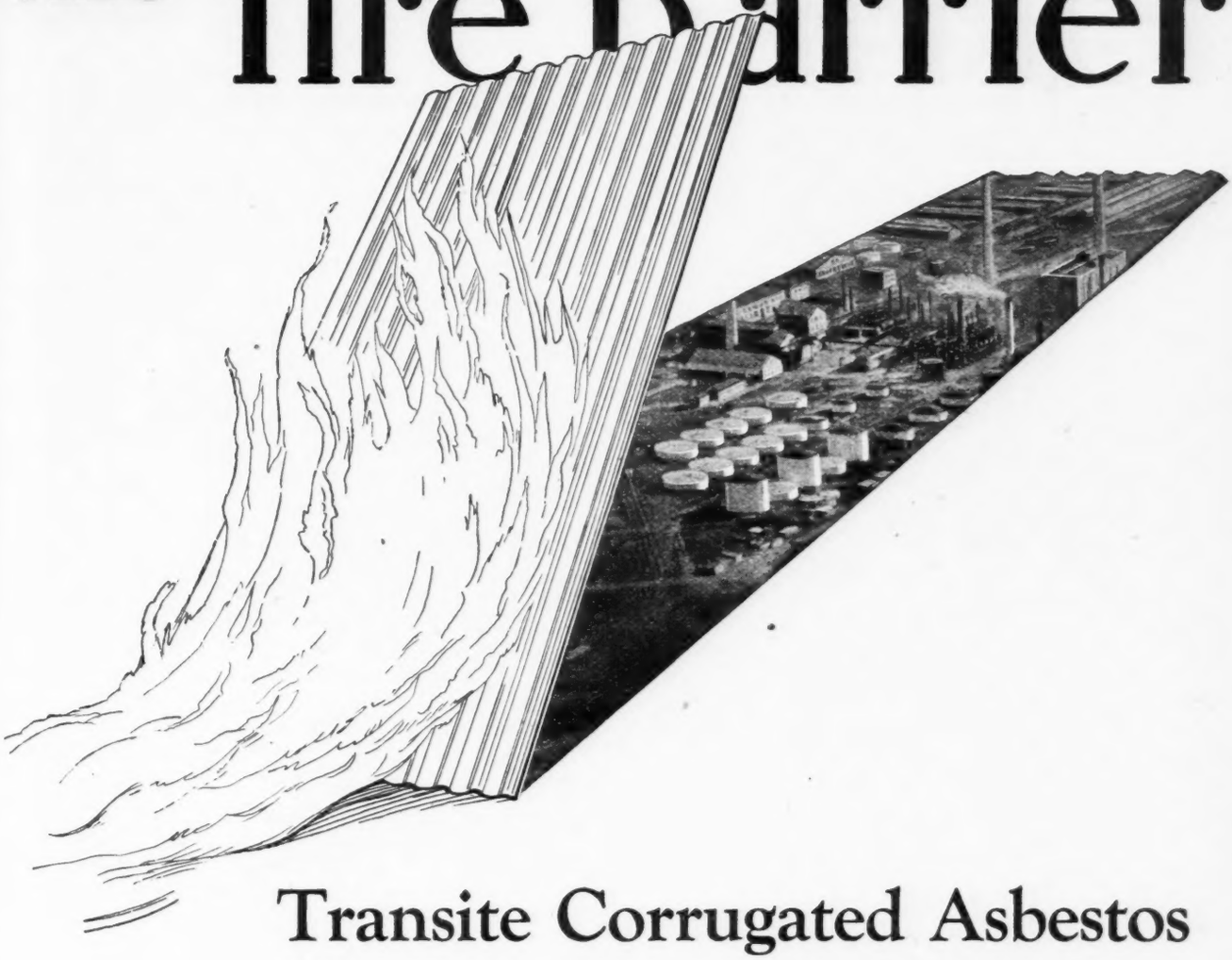
Completions in North Louisiana and Arkansas, Week Ended Jan. 16

Company	Well	Location	Depth	Yield
LOUISIANA				
Caddo Parish—Vivian				
Austin Oil Co	Peck No. 22	23–22–15	1030	40
Dixie Oil Co (Standard of Indiana)	Donovan No. 1	21–22–15	1057	15
Caddo Parish—Caddo District				
Dixie Oil Co	Robertshaw No. 70	14–21–15	1725	10
Schroder et al	Dreyfuss-Lowe No. 1	15–21–15	1370	10
Texas Oil Co	Caddo M.L.Co.No.46	23–21–15	1680	25
Webster Parish—Cotton Valley				
Ohio Oil Co	Sandlin No. 3	27–21–10	2540	35
Claiborne Parish—Homer				
Gulf Refining Co	West No. 18	20–21– 7	1500	20
Standard Oil Co. of La	Lowenberg No. 33	24–21– 8	1340	15
Bienville Parish				
L. R. Hawkes	Calhoun No. 3	15–18– 7	1520	Dry
Bossier Parish—Bellevue				
G. W. Weatherbee	Beirle No. 3	24–19–11	530	Dry
DeSoto Parish—Logansport				
Fortuna Oil Co	J. T. Alexander No.1	32–12–15	4223	Dry
Ouachita Parish				
Nat. Gas & Prod. Co	Scott No. 1	8–20–4E	2155	25m. gas
LaSalle Parish—Urania				
Nat. Gas & Fuel Co	Urania No. 2	24–10–2E	1260	Dry
Harrison County—Texas (Waskom)				
Anderson et al	Bush No. 1	R.W.Bedford HRS	1950	30m. gas
Panola County—Texas				
H. N. Crawford	Harris No.1	B.Stephens HRS	1011	s.w.
ARKANSAS				
Nevada County				
Greeson et al	Waters No. 2	2–14–21	1205	50
Columbia County—Emerson District				
J. E. Kent et al	Emerson Estate No. 1	7–19–19	2938	s.w.
Smackover				
Gulf Refining Co	R. Bennett No. 8	33–15–15	2685	40m. gas
Gulf Refining Co	L.Werner S.M.Co.No.44	6–16–16	2260	30
Humble O. & R. Co	Arnold B-8	26–15–16	2030	25
Marine Oil Co	Snyder No. 11	34–15–15	2365	150
Phillips Pet. Co	Laney A-10	31–15–15	2555	150
Pure Oil Co	Brister No. 11	28–15–15	2453	115
Roxana Pet. Co	Berg 4-A	28–15–15	1228	Dry
Standard Oil Co	Umstead B-5	32–15–15	2390	s.w.
Simms Oil Co	F. A. Laney No. 11	31–15–15	2697	30m. gas
E. M. Jones	Murphy No. 5	17–16–15	2661	junked
Magnolia Pet. Co	J. Goodwin No. 11	5–16–15	2358	100
Murdock et al	Hays No. 7	4–16–15	2365	100
Nat. Gas & Fuel Co	Murphy B-5	17–16–15	2692	75
Southern Oil Purchas. Co.	Lyell No. 7	3–16–15	2361	250
Texas Oil Co	Alphin No. 10	3–16–15	2669	10
Texas Oil Co	McClannahan No. 1	12–16–16	2565	200
Thurman et al	Houston No. 1	12–16–16	2695	s.w.

feet. The Amerada well apparently is about three feet higher structurally than its offset, and the latter will be deepened at once, it is reported. Both the Amerada and North Baltimore are drilling deep tests in Sec. 13, and both are being held up by fishing jobs at present. Each of them is at about 2800 feet depth.

In the Davenport field, the Magnolia Petroleum Co. No. 1 Chapman, in the NWc SW of 11-14-5, a quarter-mile south of production, which was reported last week as having a hole full of oil at 3398 feet, was drilled to 3403 feet during the week, and went into water without having increased the oil. It was then plugged back to 3398 feet to shut off the water and may make a well, although apparently not enough of one to cause much excitement. Preparations are now being made to shoot it.

the fire barrier



Transite Corrugated Asbestos Roofing and Siding

HERE is a corrugated roofing so fire resistant that it will stand the direct flame of a blow-torch without buckling.

It is so useful as a fire barrier material that many refineries carry a regular stock on hand to make fire-resisting housings for aerial condensers, run-down lines, tanks and other oil industry equipment.

As a roofing and siding, Transite also gives its fire-safety to buildings. In addition its all-mineral construction gives a permanence that scorns the need of paint, thereby saving a lot of maintenance charges.

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Oil Industry Department

Sixth Annual Meeting, American Petroleum Institute,
Los Angeles, Jan. 19, 20 and 21

Fuel for High Compression Engines is Here—Up to Auto Industry

By A. Ludlow Clayden,
Chief Engineer, Gas Engine Research,
Sun Oil Co., Philadelphia

IS it true that the oil industry is responsible for the delay in putting into effect improvements in automobile engine design?

That statement has been made, both directly and by implication, many times. Oil men have sat in meetings of their own associations and heard speakers from the automotive industry tell them that they, the automotive men, were ready to produce engines which would give the user greater efficiency and, hence, economy of operation, whenever the oil industry got around to supply the right fuel. The statement has gone unchallenged.

Mr. Clayden has come forward with something to say on behalf of the oil industry. It is not a "So's Your Old Man" type of argument. He shows where the automotive industry can make its start in supplying higher efficiency engines and he assures them that the oil industry is ready for them to begin. He points out also that the changes in engine design will work out more satisfactorily for all concerned if they are made gradually and not as a sudden alteration.

The oil industry is ready to supply the fuel, he says, and the other partner of the team can start any time.

Mr. Clayden's address is of especial importance to the refiner and the marketer, for he develops some thoughts on cracked gasoline and its future.—Editor.

NOW it is very often assumed that the price of gasoline is bound to increase, but this is probably an erroneous view. It is obvious to any man of business that the oil industry has everything to gain by keeping the price of gasoline as low as possible because a substantial increase in price would inevitably reduce the demand. Without any doubt we shall learn means to convert a higher proportion of crude into motor fuel, and we are also already producing fuel of steadily improving quality, thus I am convinced that in any estimate of the future conditions it is safe to assume, for many years to come, a supply of gasoline adequate to meet the demand of steadily improving quality, and at a price not far removed from that of today.

If these premises are admitted, it is logical to ask why we need trouble about the efficiency of engines in which gasoline is burned. The gasoline bill is only a minor item in the cost of operating an automobile. It is a little more important in the case of a motor truck and a bus, it is more important still for the aeroplane. However, there are certain fundamental laws which cannot be denied, and one of these is that the lower the cost of anything which is useful to man, the more will it be used and the more will its use benefit mankind. The cost of operating motor vehicles of all kinds can be, and undoubtedly will be, much reduced. The reduction will be effected not by any one great change, but by a multiplicity of small improvements, and a better thermal efficiency in the engine is one of the items.

There is a general belief that the European automobile is more efficient than the American. This is entirely untrue. The European type of passenger car does cost less to operate if the first cost be neglected, but it is less powerful, less comfortable and less convenient. The standard of living throughout Europe is very much lower than it is here. The European is accustomed to putting up with many conditions of life which we would regard as almost intolerable. If the American automobile had never developed beyond the standards of performance and conform of the European, its use in America would not have been nearly as great. The few attempts which have been made to introduce the European type of small car have been conspicuously unsuccessful. The American public does not want it and it is perfectly logical and correct in its attitude.

Thus the economy in automobile operation which Europe has obtained has been an economy of going without something, and the proper ideal of economy is so to utilize your resources that you do not have to go without things.

For a good many years past the automobile industry has been telling of the wonders it could perform if only the oil industry would provide it with a different sort of fuel, but through all this period practically nothing has been done to engines to improve their efficiency, that is, their economy as power producers, although there are a number of things which are well known and which could have been done. I am going to come back later to some of the little things, but just now will confine my attention to the one point which the automotive people have talked about most consistently, and that is, the economy possibilities resulting from the use of higher compressions.

Gasoline Change Under Way

It is a fact that with any internal combustion engine the thermal efficiency is increased as the compression pressure is raised. It is also a fact that the compression pressure that can be used varies over a very wide range with different liquid fuels. The universal use of higher compressions in gasoline engines does necessitate some alteration in the chemical constitution of gasoline, but that change is already under way and will take place rapidly during the next few years. How great that rapidity will depend very much upon whether the automotive manufacturers proceed to take advantage of it very soon or whether they neglect to observe their opportunity.

Because it is an essential part of my whole argument I want to mention some things that are undoubtedly well known to most of those present. First of all, there is so far no theory to explain why some fuels knock or detonate, while others do not do so when burned under the same conditions. In petroleum we have a series of hydro-carbons varying from the paraffins to the benzines. From the detonation viewpoint light paraffins are good, but as the paraffins become heavier they rapidly grow worse and worse. The benzines are all good, if anything the heavy aromatics are better than the light ones. All the other constituents of motor fuels vary between the two.

Suitable gasoline for high compression engines can be obtained in several ways. At present, for aviation work,

mixtures of gasoline and benzol are used, or else gasoline doped with tetra ethyl lead. Both methods are expensive and, of course, the supply of benzol as a by-product of coal is very limited. It is, I think, inconceivable that either of these aviation methods could ever become general, and if we face the problem of making all gasoline suitable for high compression some other method must be employed.

Increase in Cracked Fuel

Some of my friends in the automotive field have complained that nobody ever talks about gasoline without quoting reams of statistics. I do not believe it is necessary for me to use any figures to support my next point, which is, that the proportion of cracked to straight run gasoline is increasing, that probably rather more than half our present gasoline is straight run but that within a comparatively short time we shall reach the point where half our supply of motor fuel will be a cracked product. Cracking in the laboratory has now reached a stage where paraffins can be converted into true aromatics or members of the benzine series. Commercial cracking does not yet go quite so far, but cracked gasolines inevitably contain a low percentage of the heavier paraffins as compared with the constitution of the charging stock.

Of course, cracking has been developed mainly with the time of producing the best possible yield of material of adequate volatility, and it is a happy accident that cracking methods which are efficient from the yield viewpoint also generally produce products which are low in paraffins. At the present time there is no recognized standard method of testing for detonation or anti-knock quality, the different investigators using different methods, therefore, it is difficult to compare the data of one laboratory with another. Straight run Mid-Continent gasoline of approximately U. S. specification is an excellent example of a bad gasoline from the detonation viewpoint, although an excellent example of an excellent gasoline in several other respects. Comparison of anti-knock quality between this type of fuel and another is very frequently made in terms of percentage of benzol. Suppose for instance we require a fuel suitable for an engine with a 6 to 1 compression ratio. This might require 60 per cent of benzol with 40 per cent of such a gasoline as I have just mentioned. A straight run California gas might only need 20 per cent to give the equivalent performance, and a few cracked gasolines are now being made commercially that would require no benzine at all.

Today some refiners, in developing their cracking equipment, are giving attention to the anti-knock quality of the product as well as the yield and other considerations, but I believe that such refiners are still a minority. Despite the enormous strides in the art of cracking we still know comparatively little about its possibilities. We shall very soon reach the stage where half the gasoline produced will be cracked. Of the cracked gasoline now being produced a large proportion is suitable for use in engines with considerably higher compressions than the normal. There is enough anti-knock gasoline being made today to take care of the requirements of hundreds of thousands of high compression cars. The production and distribution of such cars would be followed immediately by the necessary changes in the distribution of gasoline so that the anti-knock fuel would be obtainable everywhere. This would temporarily involve some extra distribution costs, and it might, in some localities, be necessary to charge not over one cent a gallon extra to the motorist for the anti-knock gas, but this would be a temporary condition.

The main point that I wish to make is that there will never be a supply of anything on a large scale until there is a demand. The position today is that the petroleum industry has already, on the average, improved the detonation quality of gasoline considerably, and within the next five years can improve it a great deal more. Whether it will do so or not is in the hands of the automobile manufacturers. Reading the published statements of automobile engineers and hearing them talk, the impression gained is that their industry is waiting until an ideal fuel is available everywhere, and when this happy day arrives they will then proceed to build engines to take advantage of the new possibilities. I do not believe that things ever work that way. The petroleum industry has taken the first step and is all set to make rapid forward strides. It is time that the other partner began to assume his share of the burden.

Easier to Change Slowly

Still confining my attention to this question of compression, it is much easier to change such a product as a gasoline engine by slow degrees than by a sudden, rapid alteration. Changing over from the manufacture of a low compression engine to a high compression one is not nearly so simple as it sounds because the higher compression brings with it higher temperatures and pressures. If we are able eventually to use compressions of 6 to 1 or more it will certainly be necessary to develop both valve and ignition systems, and very probably other matters also. This, at least, was the experience with aviation engines and there is no reason why it should not be repeated with automobile motors.

There are two particular points which should be given very serious consideration by the automotive industry today. First, slight increase in the compression as new models of engines are put on the market, which ought to be perfectly practical because on the average gasoline is suitable for slightly higher compression than was the case three years ago. Second, in a good many parts of the United States the bulk of the gasoline sold is well above the average anti-knock quality, throughout California, for instance, and it would seem to me very easy to enter the thin end of the wedge by supplying higher compression cars for such territories.

One Simple, Needed Change

I said that there were some matters of detail which I would come back to later that affect engine economy, which are well known and yet which are not being given very serious consideration. One thing is engine operating temperatures. The carburetor on most cars is so adjusted that after the engine is started it will operate smoothly within a few minutes. If engines never go colder than say 150 degrees Fahr. it would be possible to use much leaner mixtures than are now employed. The ideal working temperature, from the economy viewpoint, is 200 degrees Fahr. or more, yet even in summer nearly all engines run with cooling water around 160 degrees Fahr., and in winter very much colder than that. Certainly there are a few cars so arranged that by automatic means the engines warm up quickly and are maintained at nearly constant temperature, but these are a small minority.

Even assuming the use of properly controlled temperatures and higher temperatures than are now normal, there remains the period between starting a cold engine and its warming up. There are a few cars provided with a manual control whereby the mixture can be enriched without the use of the choke. There are a few others in which special means are taken to supply heat to the intake system very promptly, but compared with the total production such machines are a negligible quantity. Considerably more than half the cars built require no more serious alteration than a redesigned intake manifold to increase the miles per gallon 20 per cent.

It has been my experience that a majority of executives in the automobile industry have just as bad a misconception of the petroleum industry as the average citizen. Having spent most of my working life in other fields, I have, since becoming an oil man, had the op-

portunity of comparing the mental attitude of this industry with others and when one knows the facts it is obvious that no industry has ever been so farsighted as the oil industry, and none has ever spent nearly so high a proportion of its total earnings on the minimizing of waste or the improvement of economy.

Oil Industry Farsighted

Compare for a moment the rubber industry in which the serious growing of plantation rubber only began after a shortage supply was threatening to strangle the industry almost at its birth, with the world wide oil prospecting that the petroleum industry of every nation has carried on. The oil industry has never for an instant lost sight of its ideal, which is, to produce from a barrel of crude 100 per cent of useful products. That is, of course, unattainable, but the losses today are nothing to what they were even ten years ago and will probably be reduced even more in the next ten years to come. Furthermore, the industry has always fostered economy in the utilization of its products. The more economical an oil burning furnace the more furnaces will be used and the greater the demand for furnace oil.

The automobile industry has followed a similar road insofar as its manufacturing is concerned, but it has not been conspicuous for foresight of fluctuations in the demand, while the used car problem and the high sales cost show that there is still plenty of room for improvement in the internal economics of the business. It may be granted that the cost of operating an automobile is not as great as it was some years ago, but this is due mainly to the fact that the average weight and size has decreased and also, in no small measure, to the enormous improvements in rubber manufacturing which has immensely reduced tire costs in terms of miles per dollar.

Of course, the public is thus far completely ignorant of the situation, and if the automobile industry waits till there is a public demand before beginning to supply, then nothing is likely to happen until the increased cost of gasoline is beginning to retard the sale of automobiles. Hitherto the automobile industry has anticipated the demand, for instance, the self-starter. The firms who first introduced such big advances, in most cases, reaped the benefit. No large producer of automobiles has ever yet made serious use of economical operation as a sales argument, probably from the belief that the American public is not greatly interested in economy. It should be remembered, however, that while this is true in one sense, it is totally untrue in another.

We, as a nation, are supposed to be wasteful people, and yet our position of pre-eminence and domination in industry is due to nothing but the fact that we utilize our man-power far more economically than any other race on earth. Because our people strive always for the highest possible efficiency, which means economy in their business, they are able to afford a style of living which appears lavish by Old World standards. We have earned the right to our high standard of living, thus whether a man is or is not interested in the economical operation of his personal car depends upon whether he regards that car as an adjunct to his efficiency or as a luxurious addition to his private life. As to his attitude regarding the motor truck, there cannot be a second's question as to which viewpoint he would take.

A. P. I. Reorganizes and Adds to Committee on Fire Prevention

NEW YORK, Jan. 18

IN A recent reorganization of the American Petroleum Institute's committee on fire prevention and protection to life and property, a new name was adopted. The sub-division is now known as the General Committee on Fire Prevention.

The committee has been enlarged and still further additions are to be made in several of the groups. A general chairman is yet to be selected. The personnel at present is as follows:

The Committee

Name: General Committee on Fire Prevention.

General Chairman: To be selected.

Executive Committee: To be composed of the general chairman and the chairman and vice-chairman of each group.

Group Committees: To be composed as follows:

EASTERN GROUP

Chairman: C. H. Haupt, Standard Oil Co. (N. J.), Elizabeth, N. J.

Vice-chairman: Frank A. Epps, Tide Water Oil Co., New York.

Members

P. R. Applegate, Northern Group of Pipe Lines, New York.

Forrest G. Brown, Atlantic Refining Co., Philadelphia.

C. A. Ellis, Standard Oil Co., of New York, New York.

O. H. Gundlach, Sinclair Consolidated Oil Corp., New York.

W. W. Lowe, Henry L. Doherty & Co., New York.

J. M. Milliken, Gulf Refining Co., Pittsburgh.

W. S. S. Rodgers, The Texas Co., New York.

E. D. Seymour, Vacuum Oil Co., New York.

H. L. Shoemaker, Standard Oil Co. (N. J.), Elizabeth, N. J.

C. E. Townsend, Sun Oil Co., Philadelphia.

Allan T. Towl, Southern Group of Pipe Lines, New York.

L. J. Walsh, Beacon Oil Co., Boston.

John H. Weller, Barber Asphalt Co., Maurer, N. J.

CENTRAL WESTERN GROUP

Chairman: George D. Locke, Barnsdall Refining Co., Chicago.

Vice-Chairman: J. A. Watterson, Standard Oil Co. (Ohio), Cleveland.

Members

H. T. Ashton, Lubrite Refining Co., St. Louis.

C. O. Beroth, Acme Petroleum Corp., Chicago.

C. E. Gerteis, White Star Refining Co., Detroit.

T. J. Callen, Wadhams Oil Co., Milwaukee.

John R. Cuthbert, Solar Refining Co., Lima, Ohio.

W. E. McEwen, National Refining Co., Cleveland.

H. H. Pierpont, Standard Oil Co. (Nebraska), Omaha.

H. R. Smith, Great Southern Refining Co., Lexington, Ky.

D. E. Sullivan, Pure Oil Co., Columbus, O.

T. J. Thompson, Standard Oil Co. (Indiana), Chicago.

W. G. Violette, Standard Oil Co. (Kentucky), Louisville.

C. G. Woodruff, Roxana Petroleum Corp., St. Louis.

ROCKY MOUNTAIN GROUP

Chairman: W. E. Lockhart, Producers & Refiners Corp., Denver.

Vice Chairman: R. S. Ellison, Midwest Refining Co., Casper, Wyo.

Members

F. G. Cramer, Denver Powerine Co., Denver.

F. W. Freeman, The Texas Co., Denver.

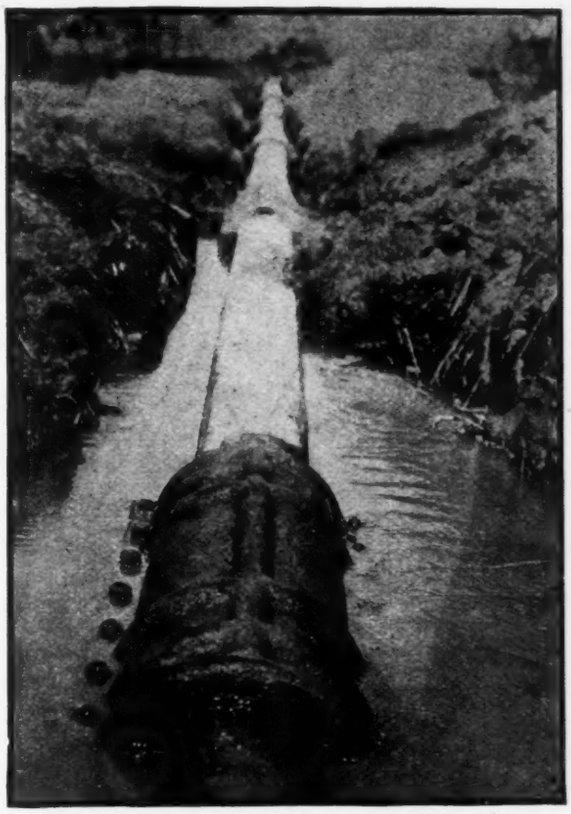
E. S. Holt, Utah Oil Refining Co., Salt Lake City.

P. R. Naylor, Continental Oil Co., Denver.

T. L. Golay, Marland Oil Co. of Colorado, Denver.

(Continued on page 73)

"Who knows who carried the message to Garcia?"



Millions know that it was carried but only a handful know who carried it.

Back of every big accomplishment is world-beating effort—going on, going on, but behind the scenes.

It is so in the oil business. It is so in the paint business.

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Five Dollars Per Capita Each Year is the Toll Taken by Fires

By Franklin H. Wentworth,
Sec'y, National Fire Protection Association

OUR country is being impoverished by a fire waste that is intolerable. The destruction of more than $500,000,000 per year in created resources by fires of which 80 per cent are easily preventable is a delinquency no competent people can possibly defend.

A few years ago my appeal to you would have been directed at an awakening of consciousness in your own industry; the consciousness of its special fire hazards and the need for their effective control. Such an appeal is not now necessary. Your leaders are alive to their responsibility for safeguarding the oil resources of the nation from fire and through your Committee on Fire Protection are moving for an inspection of your properties and a campaign of education among your dealers that must register substantial results. It is gratifying to witness the activity of the American Petroleum Institute in promoting the construction of improved oil storage tanks and in the selection of their sites with reference to community safety. What you have undertaken you will eventually complete, and the burning of oil tanks will become as infrequent as it ought to be.

Today, however, I am emphasizing a responsibility that extends beyond the safeguarding of your own properties, however vital that may be. You are citizens as well as oil men, and nothing that affects the economic life of the nation can be a matter of indifference to you. Of the personal hardships, individual sufferings and economic disasters which follow the burning of a city, too many American cities can testify. The economic significance of these fires is not confined, however, to the cities that burn. Every fire, whether it consumes a whole city or only the roof or other portion of an individual house, has to be paid for. A burned house or city does not replace itself. Food, clothing and shelter are produced only by human effort; and labor expended in replacing is withdrawn from producing more things for the satisfaction of human needs. Hence, every fire makes every man's struggle for a living harder, by compelling him to spend for his neighbor's waste what he might otherwise spend for his own comfort.

MR. WENTWORTH, who spoke on fire prevention before the A. P. I., had not much to say concerning oil fires, directly, but there is much in his talk that is of direct application to the oil man as a citizen, eager to reduce the terrific national waste of created property.

Through the American Petroleum Institute, the work of oil fire prevention is being placed on a systematic and responsive basis. Presently, it is possible, the oil industry will show by results that there is less fire hazard in oil than in any other large industry, although at one time considered about the greatest. While the oil industry still has much work to perform for itself, a corelative task is the reduction of fire losses in all classes of property and the oil man, usually a responsible citizen of a community, properly may concern himself with that task.—Editor.

Per Capita Loss $5

Our annual waste of $5 per capita means that every man, woman and child pays $5 a year for fire waste. This means that the man with the average family of five pays $25 a year fire tax. The United States government in its reports adds to this fire waste the cost of maintaining fire departments, which is as much more. This means $50 a year to the average family. If on some blue Monday in every year a representative of the government were to come around and ask each of us for a $50 check to pay our share of the national carelessness we would realize what we pay. But we do not realize that we pay it, because this tax is indirect.

Many manufacturers, and merchants know that this fire expense is a tax. They equip their premises with automatic sprinklers. They get the lowest insurance rate they can because it helps them to compete; but the man in the street—the ordinary man—does not know how this fire waste is paid. Take wool, for example. Wool in the warehouse is insured—that is a tax. It is insured in transportation, and there it pays a fire tax. It is insured in the textile factory where it is worked up into cloth. It is insured in the clothing store, insured in the tailor shop, in the department store, and all the way along this fire tax is added to the cost; and when we buy a coat, we pay it.

Every stock of goods that is insured carries this tax, and it is passed along to the ultimate consumer. The masses do not know they pay it. They do not realize that when they buy a hat, or a pair of shoes, or a suit of clothes, or anything which goes through the regular channels of industry—production, distribution and exchange—they pay this tax. Not realizing it, they are indifferent to fire. They think fires do not affect them.

For the last 20 years a steadily extending campaign of public education has been carried on by the National Fire Protection Association, with the cooperation and support of the distinguished national and international bodies composing its membership. For the past three years the Chamber of Commerce of the United States of America has given attention to this important matter of the fire waste and has helped to stimulate the local chambers to educational activity in their home cities.

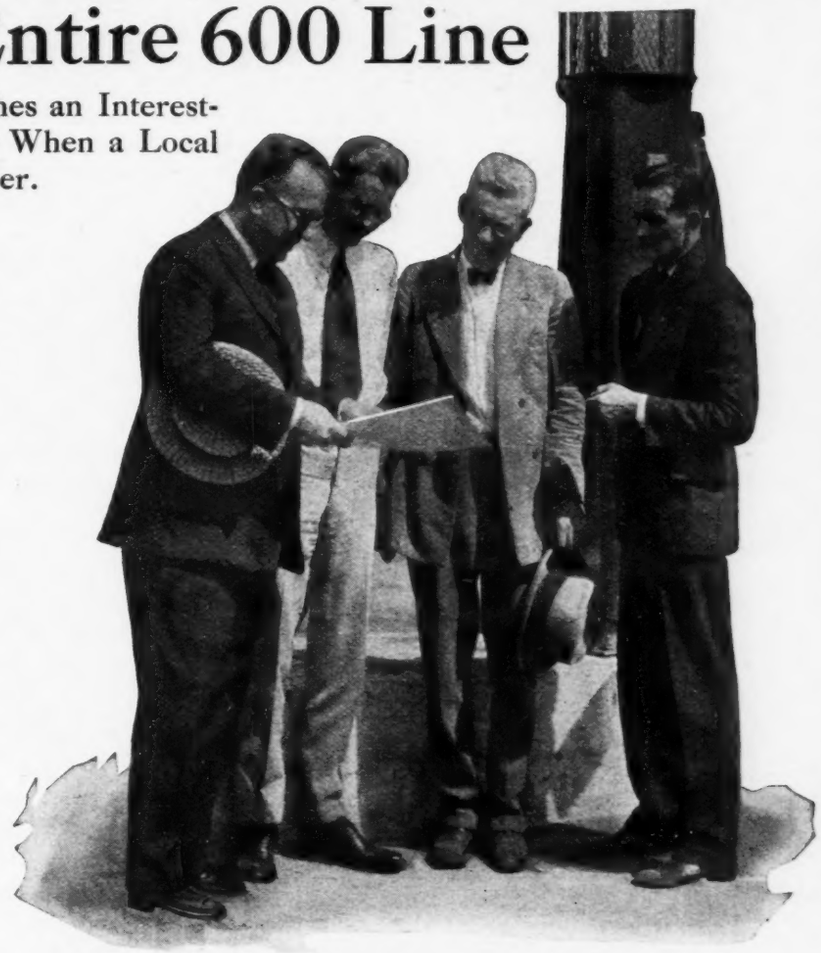
Effort is Localized

There is no doubt that the American mind is better informed on this subject than ever before. The fact that the aggregate of fire losses has steadily increased during these years of active public education is due partly to the increased property values of the nation, but principally to the fact that the popular and engineering knowledge now available has not yet been generally ap-

HAVOLINE FRANCHISE SUCCESS No. 2

The "Extra Profit" Number Increased Sales on Entire 600 Line

An Advertisement That Furnishes an Interesting Example of What Happens When a Local and National Really Get Together.



After a rapid-fire day of Motor Check tests, Vandervoort and Stilwell (center) compare notes with Goetz and Emery, Havoline distributor aides.

TODAY it is not uncommon to hear "the big locals" under very serious discussion in oil marketing circles. Only a few years ago one local oil company, or a dozen, didn't cut much ice. Now you find them recognized as powers in their communities. Well organized, most of them, and usually headed by the highest type of business man.

Anywhere you roam, you seldom fail to find at least one strong local oil company firmly entrenched. You see snappy looking filling stations, well-kept trucks, clean pumps, attractive signs. Perhaps you've never heard that particular oil company's name before, but you instantly recognize a certain power and strength and get the impression: "Here is a well-managed business. I'd like to meet the people that run it."

A Strong Combination

Meet two of them—Sherman B. Vandervoort and Clyde Stilwell, president and sales manager respectively of 600 Gas Stations, Inc., Jamestown, N. Y. Vandervoort, the business man, with keenness mellowed by experience and sharpened by competition. Stilwell, the go-getter, younger, alert to opportunity and thoroughly seasoned in the oil business.

Jamestown is a typical community, 600 Gas Stations a model success—the largest distributor of gasoline in Chautauqua County. It operates eight filling stations and serves over 100 dealers. 600 gas and oil are thoroughly advertised—a good, steady job of publicity in newspapers, booklets and outdoor signs.

The best possible tribute to the methods of Vandervoort and Stilwell is the statement of the simple fact that they have made it possible to buy 600 gas and 600 oils at almost every pump in Jamestown. 600 gas is on a par with any on the market. The 600 oils do not bring top prices, although their quality is good and sales volume is big. Vandervoort and Stilwell offer and advertise their 600 line as the best possible value for the popular price at which it is sold.

Saw New Profit Opportunity

But last spring Vandervoort and Stilwell began to feel that oil sales were being lost—and with them gasoline sales also—because 600 was not in a position to supply a nationally advertised oil to the "quality trade." The partners decided to take action that would turn the local demand for a national oil into business for 600 during 1925.

The Havoline franchise proposition first interested them, and it was their ultimate choice. Here was an oil of topnotch quality, that could easily be offered in company with 600 oils at a higher price. It was nationally advertised and in high favor locally as "the power oil," as the result of Havoline's sensational Wasson Motor Check tests.

"And," says Mr. Vandervoort, "when we found that Havoline would give us exclusive representation in our territory, protected by contract for a period of years, we quickly made up our minds."

Sales up 50 Per Cent

Vandervoort and Stilwell started things off with a month's Wasson Motor Check demonstration on Havoline in Jamestown. Free power and slippage tests were offered to crankcase buyers. Havoline's quality was put to the test "right under the gun." People saw it and marveled at it. In this one month, Vandervoort and Stilwell increased Havoline sales in Jamestown by 50 per cent.

Newspaper advertising stirred things up and kept business coming. Havoline cooperated in this, and 600 took the opportunity to run a powerful gasoline advertising campaign at about the same time. Dealers fell quickly into line and were provided with Havoline signs, booklets, Oil Power Guides, and every other sales help that a national operator can supply. Business at 600's own stations climbed steadily.

"Twelve thousand gallons Havoline sold since July," declared Mr. Vandervoort on December 15. "Sold at a longer profit than we can make even on our own local oil. By the end of our first year, we'll move 25,000 gallons of Havoline and put on a healthy increase for our line of 600 oils. What's the answer? I'd say it is that people can now drive in to a 600 station or dealer sure of getting whatever they want. We don't have to turn any business away. And we can look forward to exclusive control of Havoline for a definite, contracted period of years and make our plans accordingly."

[Outside Indiana, Illinois, Ohio and parts of Michigan and Kentucky (except territories already allotted), the Havoline franchise and Havoline support are open to local oil operators on a basis exactly like 600's. Other things being equal, inquiries are given preference according to time of receipt. Wire or write A. H. White, Indian Refining Co., Inc., Lawrenceville, Ill.]

HAVOLINE
– the power oil

Sixth Annual Meeting, American Petroleum Institute, Los Angeles, Jan. 19, 20 and 21

plied to the problem. While the impoverishing effect of the fire waste is national, every fire in itself local, and until in every community the impulse and the machinery exist to attack local fire hazards, public education is only of potential value.

The plan which the National Fire Protective Association is now working out, through the instrumentality of field engineers who are on the road continuously for the purpose, is to organize in every municipality, with the assistance of the Chamber of Commerce and other local organizations whose national associations have pledged co-operation, a fire prevention committee which shall make a survey of the fire hazard conditions and apply the now well-known methods of improving them. This local committee, where it functions most effectively, makes the fire commissioner or fire chief the central factor or instrument of service. If the co-operation and enthusiasm of this officer, who is paid by the people to do this very thing, are not aroused, the committee's action is likely to be sporadic.

Where the fire commissioner or fire chief has the imagination to see the power that will be given him through a non-political committee or cabinet composed of men and women picked from the most influential organizations of the city, the accomplishment of local fire safety may be only a matter of time. The fire department officer will then have about him a group which can promptly create, outside of politics, a public sentiment in support of his projects for the elimination of fire hazards.

Must Do Inspection Work

The day of the fire department whose sole function is water-throwing is already past. Modern fire departments, although adequately prepared for fire extinguishment, must also be capable inspection agencies. Their officers must be informed on the subject of fire barriers and retardants, the chemistry of fire, the action of draughts, the effect of humidity and any other partly technical and engineering topics a knowledge of which is essential to their intelligent and effective service. Many American fire departments in the past, even where not rendered ineffective by political influences, have been inadequate largely because the public has not demanded an intelligent service of them. The people being now more completely alive to the economic significance of the fire waste, the fire departments are receiving more critical attention, and a higher grade of intelligence and efficiency on the part of officers and men is expected.

There is no longer any reasonable excuse short of an earthquake for the occurrence of large or sweeping fires; their contributing causes are too well known. It is the responsiblity of the modern fire chief to know where the dark spots are in the high-value or congested portion of his city and get them eliminated. If automatic sprinklers or firewalls, or doors, or windows are needed to prevent a sweeping fire from getting under way, he should know where they are required and see that they are installed. A large fire is proof either of incompetency in inspection service or of timidity in securing fire protection. In every city there are buildings which are a menace to the community in which the owners will not install adequate fire protection. It is difficult to make building codes retroactive and the power of taxation cannot, it seems, be effectively applied to discourage landlords of fire-traps from continuing to gather in rents from them. Buildings of this sort endanger the city day and night and impose a higher insurance rate upon the property of all their neighbors.

A Direct Obligation

It must become increasingly clear to large property owners generally that it is their obligation, even for their own sakes, to provide private fire protection, at least a very adequate first-aid equipment. All industrial plants on the outskirts of cities should have sprinkler protection, making them largely independent of city fire departments, which through their reduction of man power due to the general introduction of the two platoon system and the impediments to prompt arrival due to congested conditions of traffic, are becoming less and less dependable outside of their immediate areas. For the same reason the basements, at least, of all large down-town properties should be equipped with sprinklers, for it is in basements that fires are hardest to fight and usually slowest in discovery.

The improvement of building codes, the preparation and enactment of fire prevention ordinances, a vigorous and effective prosecution of conscious incendiaries, and all other measures that will promote fire safety, are within the province of a local fire prevention committee. General education of both children and adults must of course be carried on indefinitely, and thus the habits of succeeding generations in America will be improved. Carefulness in handling fire-producing processes and materials will become ingrained in us as it is in the Germans, in whose country the man who has a fire is looked upon as a public offender.

When we add to our educational processes the activity of the fire department of the future, shielded from political interference and encouraged to meet its fullest responsibilities in the elimination of fire hazards and the maintenance of proper housekeeping conditions, the shameless fire record of the present will begin to be steadily abated.

The creation of a competent local committee of influential citizens assembled about the city officials charged with the community fire safety furnishes the most practical organization for a successful attack upon the fire waste. It is the function of our field to advise with, stimulate, and serve such committees where they exist and to create them where needed. It is in this important work that we desire the active assistance of the oil industry, not only through the co-operation of its national and local organizations wherever existing, but by its individual members, who can contribute their personal advice and influence in creating conditions in their own cities that may safeguard their own properties and that of their neighbors from destruction by preventable fire.

2,100-Gallon Fuel Tank Mounted on Trailer

CHICAGO, Jan. 16.—A five-ton White tractor with a 2100-gallon, four compartment tank mounted on a Lapeer trailer with a fifth wheel and connection to tractor, has just been added to the equipment of the Commerce Petroleum Co., with headquarters here.

A pump is mounted on the tractor with a flexible 2-inch hose connecting it with each compartment of the tank, A. W. Peterson, secretary and treasurer, says.

With this layout, distributing the load on two axles, it is possible to handle a full load of 2100 gallons of fuel oil on the suburban roads without violation of road laws, where, with the ordinary truck, only 1200 gallons may be handled.

The company recently completed a distributing plant at Northfield, Ill., which is being fully operated. The plant serves the entire north shore district from Evanston to Waukegan.

All trucks of the company carry the slogan "Wheels of Commerce," which advertises the company's oils for automobiles, railroads and all kinds of gears, according to Mr. Peterson.

But even with this equipment the company is considering having all its oils hauled by a trucking company, instead of maintaining its own fleet, drivers, and mechanics. Mr. Peterson is seeking arguments for and against this idea.

LONGVIEW, TEX.—The American Refining Co., Wichita Falls, recently acquired the S. L. Melton Oil Co., of Longview, including its holdings here.

(Continued from page 68)

MID-CONTINENT GROUP

Chairman: P. M. Miskell, Empire Refineries, Inc., Tulsa.

Vice Chairman: Walter Miller, Marland Refining Co., Ponca City.

Members

Lloyd F. Bayer, Tidal Refining Co., Tulsa.

J. H. Boyle, Chestnut & Smith Corp., Tulsa.

H. M. Edinger, Barnsdall Refining Co., Tulsa.

J. R. Freeman, Carter Oil Co., Tulsa.

John L. Gray, Shaffer Oil & Refining Co., Tulsa.

E. W. Goebel, Jr., Kansas City Refining Co., Kansas City, Kan.

C. L. Henderson, Vickers Petroleum Co., Wichita, Kan.

W. K. Holmes, The Texas Co., Tulsa.

R. R. Irwin, White Eagle Oil & Refining Co., Kansas City, Mo.

Dana H. Kelsey, Prairie Oil & Gas Co., Independence, Kan.

E. A.Metcalf, Standard Oil Co. (Kansas), Neodesha.

J. H. Miller, Miller Petroleum Co., Kansas City, Mo.

W. E. Perdew, Derby Oil Co., Wichita, Kan.

F. A. Pielsticker, Skelly Oil Co., El Dorado, Ark.

Hollis P. Porter, Gypsy Oil Co., Tulsa.

H. Morton, Mid-Continent Petroleum Corp., Tulsa.

Victor H. Smith, Lion Oil & Refining Co., El Dorado, Ark.

GULF STATES GROUP

Chairman: James Anderson, Humble Oil & Refining Co., Houston.

Vice Chairman: L. R. Holmes, The Texas Co., Houston.

Members

Frank L. Chase, Lone Star Gas Co., Dallas.

M. C. Ehlen, Crown Central Oil Co., Houston.

W. B. Hamilton, Texhoma Oil & Refining Co., Wichita Falls.

Elliott Jones, Elliott Jones & Co., San Antonio.

H. H. Hewetson, Louisiana Oil & Refining Co., Shreveport, La.

E. C. Kincade, Gulf Pipe Line Co., Houston.

F. R. Schneider, Simms Petroleum Corp., Dallas.

D. C. Stewart, Magnolia Petroleum Corp., Dallas.

W. Paul Gage, Houston.

PACIFIC COAST GROUP

Chairman: Ralph J. Reed, Union Oil Co., Los Angeles.

Vice Chairman, H. H. Hall, Standard Oil Co. (Calif.), San Francisco.

Members

Carlos E. Cortes, Shell Co. of California, San Francisco.

S. J. Dickey, General Petroleum Corp., Los Angeles.

L. D. Jurs, Associated Oil Co., San Francisco.

C. E. Olmsted, California Petroleum Corp., Los Angeles.

GULF Refining Company

General Sales Offices
PITTSBURGH, PA.
District Sales Offices
New York, Houston, Atlanta, Boston, New Orleans, Tampa, Philadelphia

REFINERS OF OKLAHOMA TEXAS AND LOUISIANA

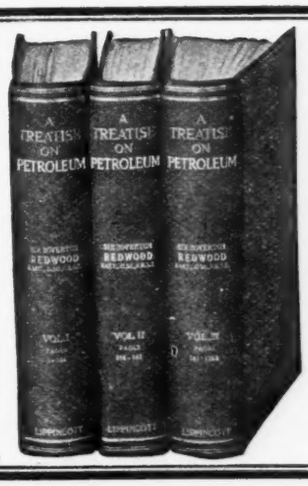
PETROLEUM

REFINED OIL
GASOLINE
NAPHTHA
GAS OILS
PARAFFINE WAX
ASPHALT

Fuel Oil--Lubricating Oils

CYLINDER ENGINE
CORDAGE

RED AND PALE PARAFFINE OILS



Information on all branches of the petroleum industry is to be found in the 4th edition of A TREATISE ON PETROLEUM by Sir Boverton Redwood.

To obtain this valuable set make your check for $39 payable to

NATIONAL PETROLEUM NEWS
811 Caxton Bldg. Cleveland, Ohio

We See By The Papers—

Conscious and unconscious humor concerning the oil industry from the press of the nation.

National Petroleum News

A Mature Decision

Editor of the Pecos, Tex., Enterprise thinks it all over and then reckons he will not make up his mind yet:

With the Wheat Well continuing to bale, swab, and clean out the hole, many guesses are being raised as to its possibility for production. Of course there is the "wise" assertion that it is through, then there are the intimations that it is holding back, waiting for a chance to sell to one of the major companies. But some of the local men, and scouting geologists use comparisons of this location and it's neighbor, the former Toyah-Bell well, that struck oil, the derrick within a mile of the "Wheat" rig. Some think that this hole should be drilled deeper, to find the second strata of oil sand, that was found by the Toyah-Bell, and there are many other reasons given for this move. After listening to all of the various stories, one is left in the air, wondering who to believe, and finally reaches the wise conclusion, that time will tell.

The Subterranean Chorus

Notes on an oil-finding device set out by the El Paso, Times:

The machine is operated several feet from a tripod set up at a particular location and produces various sounds, which may be distinguished by the operator without the aid of the dial, which tells the depth of the formation.

Oil operators who observed the workings of the instrument declare many sounds are familiar. An oil sand is said to give a sound similar to the frying of grease. If the vibrations are rapid the oil is a high test; if vibrations are slow, the oil is a low grade. Gas sands are said to give a sound like a gas well blowing off. A water sand sounds similar to that made by water running in a hydrant.

The Farmer's Sand Again

Victorville, Calif., Herald cautiously drops a hint to the drillers:

The hole is down to a depth of about 3220 feet and some very favorable formation has been encountered. Some who have studied the situation are of the opinion that a good flow of oil may be secured by going deeper if the present depth does not yield a satisfactory supply.

More Dark Conniving

Anyway the oil industry turns it is certain to mystify the public, thinks the Atlanta, Ga., Journal:

Just what it is that causes the price of gasoline to change once or twice a year has not been satisfactorily established, but many profess to believe that it is good business policy for the companies acting in sympathetic accord, to allow, occasionally, slight variations in the price. Otherwise, it is contended, the public would be still further mystified as to why the price remained stationary.

Well, at any rate, it is interesting to know that the oil companies are able to regulate their profits regardless of the law of supply and demand.

A Real Stayer

Tribute to a wildcatter in the Tyler, Tex., Times:

Showing of oil and gas found in his No. 2 well thoroughly convinced him that he is working in a real oil field, and he absolutely refuses to give up. He is like an old coon dog that has actually seen the coon go up a tree, and though unable to locate him definitely, knows for a fact that he is still there, and is determined to bring him to the ground if it takes all summer, and then several more summers.

Ups and Downs of the Bit

From the Reading, Pa., Eagle:

It was while she was connected with this company that Mrs. Childers became familiar with all phases of the oil industry. She spent many days at drilling wells, learned the ups and downs of drilling, became a judge of the oil field laborer, and studied the refining end of the industry in all its phases.

Tee Pee's Production

New York World devises new method of reporting company resources:

Texas Pacific Coal and Oil Company has 10,000 barrels daily production, of which $6,000 are in Texas and the balance in Montana.

Gasoline "Bootlegger?"

From the Piedmont, Mo., Banner:

Walter Turk has installed a filling station between his residence and the hall. If you want to please him, stop and get full.

OIL MAN?
GOSH, NO— I'M A JEWELRY SALESMAN FROM CHICAGO
OFFICE
SINCE THE ANNOUNCEMENT OIL HAD BEEN DISCOVERED 30 MILES DISTANT THE APPEARANCE IN BABBITSVILLE OF EVERY STRANGER AROUSES CURIOSITY.
SEDGWICK

The Editor's Viewpoint

National Petroleum News

Striving for Safety

NOTABLE work in accident prevention is being accomplished by the National Safety Council but to date relatively few oil companies have availed themselves of the council's service. Those companies that are in the council, are mostly the large integrated ones and their savings through reduction of accidents and fires with resultant increased profits, have been large, several of them report.

Lost time accidents among more than 4000 employes at the plant of the Standard Oil Co. of Louisiana have been reduced 79 per cent, according to George B. Cooke, that company's safety engineer. F. C. Singleton, in charge of the safety work in the marketing division of the Standard Oil Co. of Indiana, reported at the last congress of the National Safety Council that in 1924 vehicles of his company crossed railroad tracks 31 million times without a single mishap.

The National Safety Council has a petroleum section which deals with accident and fire prevention work in all divisions of the oil industry. At the congress, held usually in the last week of September each year, representatives of most of the large oil companies gather together at the petroleum section meetings and exchange ideas on safety work and hear of what is planned to reduce further suffering and the loss of time, activity and profits because of preventable accidents. These meetings would be profitable to every oil man and close to 100 large company representatives attend them each fall.

The work should be equally valuable to small companies as to large companies, perhaps more valuable because one large accident, such as a serious fire, the wrecking of an expensive tank truck, the death of a workman, could put a serious hole in the profits of a small company in a year.

The cost of membership in the National Safety Council with all its services and benefits is low. For an individual or a company with one to 50 employes, the annual membership fee is only $10 a year. For a company with 51 to 150 employes, $20 a year; 151 to 600 employes, $40; 601 to 1200 employes, $60; 1201 to 2000, $80; 2001 to 3000, $100; 3001 to 5000, $120; 5001 to 10,000, $160, and 10,001 or more employes $200.

And what goes with the annual membership, besides the exchange of information and ideas at the annual congress? A subscription to National Safety News with each $20 of the membership fee. Thirty-six two color posters per month showing how to do common tasks safely. Free consultation service on any safety problem a member may encounter and wishes solved. Lantern slides and films dealing with accident prevention problems, cost of transportation being the only charge. A pamphlet covering safe practices, issued every second month. A complete report of the proceedings of the annual congress, covering more than 1000 pages.

The petroleum section is now putting out posters covering safe practices in the oil industry. These posters may be placed on plant bulletin boards, or posted in the field where workmen may see them daily. Copies of posters in addition to the number that goes with the membership, may be obtained at a slight additional charge.

The petroleum section is headed by able men. E. J. Senne, Vacuum Oil Co., is general chairman. Dr. R. P. Anderson, American Petroleum Institute, is general vice-chairman. Frank A. Epps, Tide Water Oil Co., an authority on oil fires, is secretary. In addition there are three regional chairmen. They are: Thomas A. Waddington, Standard Oil Co. of New Jersey, for the Atlantic division; Ray E. Miller, in charge of safety work for the Mid-Continent Oil & Gas Association, Mid-Continent division, and Roy W. Kelly, Associated Oil Co., Pacific division.

These men and every oil member of the National Safety Council are working constantly to reduce accidents and fires in the oil industry and without compensation save the satisfaction that comes of a good deed done. They are deserving of the support of every oil company, large and small. It would be furthering an excellent cause if every company or individual operating for himself would write to the national council at 168 N. Michigan Ave., Chicago, and apply for membership. The council is a non-profit making organization 14 years old so by putting in a few dollars the goose of nobody except one's own, would be fattened.—R. B. S.

The Lesson of the Cigaret Stub

ONE day in the Salt Creek field a visitor came out of the boarding house after the noon meal with the superintendent of one of the companies. This company is noted for the orderly appearance of its camps and leases.

A new man on the job finished a cigaret and threw the stub on the ground. Solemnly, and without comment, the superintendent walked over and picked it up, walked about ten feet and put it in a trash can. Still without comment he went into his office. The new man's face showed his discomfiture.

In the office the visitor commented on the unusual procedure and the fact that the man had not been "bawled out."

"He will remember it a lot longer this way," replied the superintendent. "He now knows that everyone on this property is paying attention to the appearance of things. He'll never forget and the lesson will not need repeating."

It wasn't merely the desire to maintain a good looking camp that had caused this executive to insist upon what appear to be trivial things. He knows something that fits in with producing oil efficiently. That is that an orderliness in little things leads to effective methods in the big things. Look over the leases of this company and you find no loose ends. No tool is ever thrown down anywhere it is used, with the intention to pick it up and put it away later. Consequently, it is never lost and is available the next time it is needed. When a well needs pulling, nobody decides to put it off. He gets at it right away. Everything on the property is attended to when it should be.

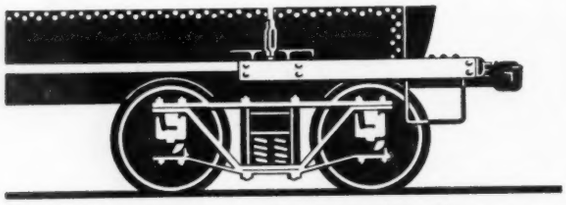
Nearly every man has it in him to be orderly and to take a pride in the good appearance of his surroundings. A man would rather work for a company whose properties are "dolled up." If he hasn't the habit of being orderly, it is easily formed.

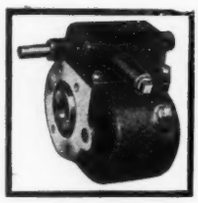
The custom of putting the trash in the can isn't so trivial as it might at first seem.—L. E. S.

A TANK CAR WITHOUT BRAKES !

YOU WOULD NOT USE IT

Because, next to starting, it is most important to be able to stop.





Effective brakes are equally important on your Tank Trucks, and for the same reasons.

THE FULLER
AUXILIARY TRANSMISSION
FOR FORD TRUCKS

allows you effective use of both brakes at all times. You're safe from the hazard of being "stranded in neutral," with service brake useless. A simple device built into the FULLER *eliminates neutral position.*

The device that does this is exclusively FULLER. No other auxiliary transmission has it.

The FULLER'S gears can be safely shifted on a hill or on the level—standing still or moving — going forward or backward — whether the motor is running or dead. No auxiliary brakes are necessary.

Compare the FULLER, costing $60, with more expensive devices. You will see that it is low in price only because of its very simple, ingenious design. Its quality and practical value are very high.

Ask your Ford Dealer for full information about the FULLER; or write us for literature.

FULLER FEATURES

Four Speeds Forward — Two Reverse.
No Neutral Position (Brakes Always Available).
No Added Strain on Motor. Universal Joint, or Drive Shaft.
No Rebuilding Necessary; No Cutting of Drive Shaft.
Installation, 2 to 3 Hours, No Special Tools Needed.
Very Simple and Easy to Operate.
Built by Fuller; Largest Manufacturer of Truck and Bus Transmissions in the World.
Fully Guaranteed for 90 Days Against All Defects.
Price—$60 to Truck Owner.

PRICE $60
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Plus 2½% War Tax
$5.00 Additional
West of the Rockies

FULLER AND SONS MFG., Co.
KALAMAZOO MICHIGAN
TRANSMISSION BUILDERS FOR 22 YEARS

The Business of Oil Production

published by Johnson, Huntley and Somers, makes it possible for the beginner in the oil-producing business to obtain a working knowledge of the best methods and of their application.

The man who is experienced will find that it will answer practically any question that may arise on the business side of his enterprise.

The cost of this book is $3.50 and may be obtained by sending your check to—

National Petroleum News, 832 Caxton Bldg., Cleveland, O.

Bodie-Hoover To Market And Compound Oils

CHICAGO, Jan. 19.—The Bodie-Hoover Petroleum Corp. has been incorporated here to do a general marketing business, also compounding and blending of all grades of lubricating oils. Headquarters are at 1101 W. 37th street.

Incorporators of the company are: George L. Bodie, for several years vice president of Fred G. Clark Co., Cleveland, O., and for the last year and a half, manager of lubricating sales division of Cosden Sales Corp., Chicago; and S. T. Hoover, for several years western salesmanager at Chicago for Fred G. Clark Co. Mr. Bodie is president and Mr. Hoover treasurer.

A modern plant, with all storage tanks under cover excepting a few tanks for lighter grades of oil, has just been completed on the Chicago Junction railroad which maintains daily trap car service to all railroads diverging from Chicago.

Storage facilities include 630,000 gallons for Pennsylvania, Mid-Continent and Texas oils, and 140,000 gallons for blended and compounded oils. In addition, the company has a complete grease plant manufacturing all grades of soaps, transmission oils, and Ford base compounds, and has a separate room for compounding sulphurated oil and cutting oils.

The company has endeavored to obtain the advice of mechanical engineers on the construction of its plant so that only the best features could be incorporated.

The plant has facilities for loading 12 cars per day and for unloading six tank cars, all under cover.

London To Have Big Oil Exhibition

CLEVELAND, Jan. 19.—An international oil exhibition to surpass anything ever staged in Europe by the oil industry, has been planned to be held from April 21 to May 8 at the Crystal Palace, claimed to be the largest exhibition building in the world, in London.

Exhibit space and any additional information can be secured from Henry James Buckland, general manager, and communications should be addressed to him at the Crystal Palace.

An international petroleum congress will be held during the exhibition. Every branch of the industry will be represented and special sections will be devoted to government exhibits, laboratory and shale exhibits, fire-fighting apparatus, models section, etc. Machinery will be displayed in motion.

PONCA CITY, Jan. 19.—Franklin R. Kenney, president of the Marland Oil Co., of California, and formerly a Marland official in this city, has been made a director of the Chamber of Mines and Oils of California.

Home Enterprise is Strong Factor In Southern Oil Marketing

By Roger B. Stafford
N. P. N. Staff Writer

WHILE the large integrated oil companies are making the most of the market opportunities afforded by the industrial development of the southeastern states, Independent jobbing organizations having distribution in one county, two counties or part of a state, are expanding proportionately.

The number of jobbing companies in any community is probably less than in the north and west, and the number of the major companies greater. But the local Independent company is closely tied up to the community and usually maintains a strong position.

The Independent companies are jealous of their positions and quick to correct anyone that might insinuate that they were controlled by their major competitors. An example of such a correction appeared recently in a Birmingham, Ala., newspaper when the Wofford Oil Co. bought space to tell the public that G. T. Wofford owned 84.8 per cent of the outstanding capital stock; that Mrs. Wofford owned 15 per cent, and that other persons owned only 80 shares of 53,284 shares issued by the company. None of the stock was owned by the Pure Oil Co. which rumor had it had purchased control.

Home Industries

The desire to maintain their standing as strictly home industries is no less keen through other parts of the southeast although the value of handling well recognized brands of gasoline and oil is recognized by many of the smaller distributors. On the other hand the major companies recognize the value of the home industry so instead of pushing into a community by building their own bulk and service stations several lease the stations and equipment of the local companies, and hire the owners to operate them, or make a long term contract with the local companies to handle their goods.

However, some of the older southern Independent companies have built up a profitable market under their own brand names. They are reluctant to give up those names with their valuable goodwill so if they buy from the larger companies the goods must be to certain specifications or quality which their customers have learned to rely on.

Over part of the south the motoring public has been educated for almost eight years on the merits of Woco-Pep; it has been handled by licensed agents in three states and the parent company at Birmingham would not care to relinquish that trade name.

R. N. Reed, president and general manager, Reed Oil Corp., Atlanta, Ga.

The same can be said of the Go-Zip benzol motor fuel marketed in Birmingham by the General Oil Corp., founded a little more than two years ago by J. Gregory Johnston who had been associated with the Wofford Oil Co. as vice-president.

In Atlanta Blue Streak gasoline of the Reed Oil Corp. is virtually a household word with the motoring populace, and this is also true of Chasonoil of the Charleston Oil Co. at Charleston, S. C. Elsewhere one encounters some brand which has a big local demand, the result of good salesmanship and uniform goods and service.

These motor fuels may be straight gasoline or they may be some kind of blend. In Birmingham benzol is the vogue. Probably more benzol blended motor fuels are sold there than in any other city in the United States. The output of the by-product coke plants of five large companies is taken by the Wofford and General. The Wofford is supplied by the Tennessee Coal, Iron & Railroad Co., subsidiary of the United States Steel Corp.; the Sloss-Sheffield Iron & Steel Co., and the Republic Iron & Steel Co. General gets benzol from the Alabama By-Products Co. and the Woodward Iron & Steel Co.

Others at Birmingham

Besides the Wofford and General, there is another Independent in Birmingham, the Acme Oil Co. Large companies operating in the southern steel centers are the Standard Oil of Kentucky, The Texas Co. and Gulf Refining Co.

The Wofford has one of the largest bulk stations in the country—perhaps it is the largest Independent inland station. More will be said about it in a later article.

The General which bought the Indian Refining Co.'s Birmingham business has storage facilities for 600,000 gallons and has about 30 service stations which are leased to individual operators. Better results are obtained when the operator has some financial interest in a station,

A General Oil Corp. station at Birmingham, Ala., operated under lease by Aydelott Motor Service Co. Shrubs, dwarf evergreens, and hanging baskets of vines and flowers help to enhance the beauty of this white Colonial style structure with green blinds. A car laundry and oiling pit are in an "L" which may be seen in the picture beyond the canopy.

Edward Valves for Oil Refineries

Forged Steel —for pressures up to 500 lbs., —temperatures to 1100° F.

THAT'S the service for which Edward Forged Steel Valves were built—therefore their selection not only assures dependable and accurate action under normal conditions but provides for the same certainty of operation under peak pressures and extreme emergencies.

While ruggedly designed for severe service and of high grade construction they are manufactured on such a quantity basis that they are low enough in price to allow their use in low pressure line.

Edward Forged Steel Refinery Valves have 100% pipe area. Bodies, bonnets, glands and union nuts are machined from solid steel forgings, other parts of steel or Monel Metal as required. Special all-steel valves for use with sulphur content crude.

The Edward—*forged steel*—is a valve that can be standardized on and used anywhere. Built in Globe and Angle pattern with Edward Protected Seat and Disc or Plug-type and in sizes from ¼ in. to 2 in. inclusive.

We have a special "Refinery Valve Book"—Request a copy for your files

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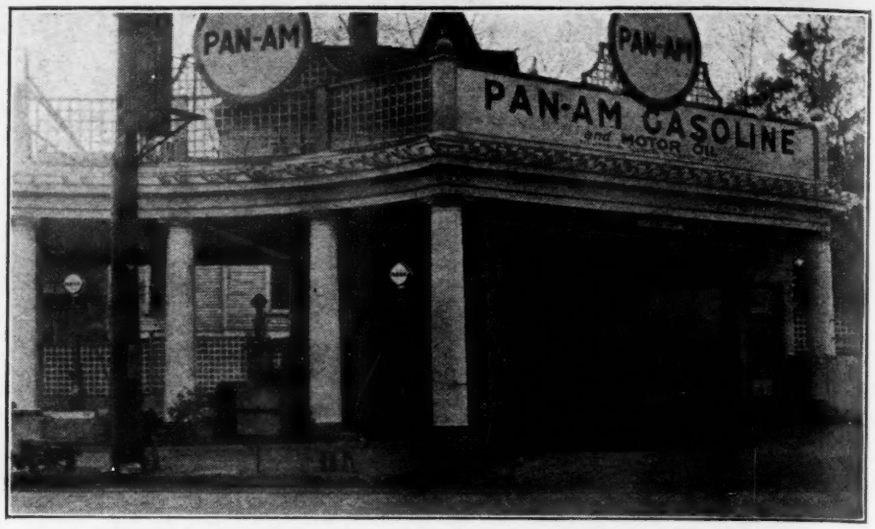
EAST CHICAGO, INDIANA.



Type of service station of the Pan American Southern Petroleum Co. in Atlanta, Ga. The stations are shaped like a piece of pie with the point bitten off—homely description but serviceable. Color scheme is old ivory and light blue.

Mr. Johnston said. Last year the General did 3,000,000 gallons business. The company has six tank trucks and two stake trucks, which operate in only Jefferson county of which Birmingham is the seat. Besides the gasoline and kerosene business the company has a good lubricating oil trade.

Before being vice-president of the Wofford, Mr. Johnston was agent for the Gulf at Birmingham for 11½ years. Associated with him is George A. Blinn.

Much Free Equipment

Free equipment is one of the big issues in Birmingham and kerosene equipment is more of a problem than gasoline pumps and tanks. Kerosene measuring pumps and tanks as large as 120 gallons have been placed promiscuously about the city by some of the larger companies, even in the back yards of private homes.

There is a sprinkling of Independent companies at Mobile. They are the Palm Oil Co., Huxford Oil Co., Mobile Oil & Export Co. and the McCown Oil Co. The Pure Oil Co. operates there through the Tiona Oil Co. There are also the Standard, Gulf and Texas, the latter two having tide water terminals.

Los Angeles is credited with having more service stations in proportion to the population than any other American city. We submit the name of Atlanta for a close second place. Atlanta, according to R. E. Hodgson, district manager of the Standard of Kentucky, had 265 drive-in service stations early in December. The city's population is estimated at 250,000 so this means one drive-in station to fewer than 1000 persons, and probably a station to fewer than 200 cars. And this number of stations does not take into account the garages, and curbside pumps, which are in front of groceries, accessory stores and other places. Curb pump installations are no longer permitted in congested districts but the building of drive-in stations continues throughout the city and suburbs.

R. N. Reed, president of the Reed Oil Corp., is the Nestor of the Atlanta Independents. He is a proponent of organized effort among the smaller companies for better relations among them, and his advice is sought when trade problems perplex them. He is a director of the National Petroleum Marketers' Association and one of the moving spirits in the attempt to have the southeastern jobbers organize. An organization meeting is to be held in Atlanta Feb. 15 and 16 and it is likely that he may be elected the president of a regional association.

Mr. Reed has been in, out and in the oil business. A few years ago after building up the Reed Oil Corp. he retired. But the business did not thrive so well so he's back again and growing. He is a public spirited citizen and is one of the leaders in community affairs.

The Reed company has 19 stations in Atlanta and suburbs. It features a blue gasoline, called Blue Streak, and was among the first distributing companies in the country to employ the color feature.

Sinclair Latest Entry

The Sinclair Refining Co. is the latest to enter the Georgia field. Its southeastern headquarters are in Atlanta. It has 20 bulk stations through the southeast and is building seven more. About 40 distributors are handling its products under a commission plan. The Atlanta office also directs Sinclair operations in Florida, Alabama, South Carolina and Tennessee east of the Tennessee river. Its ocean terminal at Jacksonville, Fla., started operating in October and another terminal at Charleston is to be in operation early this year.

The Pan American Southern Petroleum Co. has bulk stations in five states —Georgia, Tennessee, Mississippi, Louisiana and Florida. The business in Florida, as stated in previous articles, is in the name of the Mexican Petroleum Corp. of Maine, and in Louisiana in that of the Mexican Petroleum Corp. of Louisiana.

The Wofford Oil Co. of Georgia is now controlled by the Pure Oil Co. It

has bulk plants at Macon, Atlanta, Hawkinsville, Columbus, and Rome, and is building one at Carrollton. The Hawkinsville station is operated by the Home Oil Co. but salaried agents are in charge of the others.

Texas Leasing Stations

Atlanta also is the headquarters for the southeast of the Texas Co. J. S. Jones is district manager and B. E. Robertson superintendent of the sales department. The Texas Co. has not been building stations of late but has been leasing the stations of established Independent companies and operating them under a commission plan.

The Gulf is one of the largest distributors in Atlanta and Georgia. Among the Independents there are the White Lilly Oil Co., and Holcomb Oil Co. The Galena Signal Oil Co. entered Atlanta a few years ago but at present is not distributing gasoline there.

Three large refining companies maintain sales offices in Atlanta to conduct a tank car business. The Atlantic Refining Co. office is in charge of Frank LeB. Richdale who sells the entire output of the company's Brunswick refinery. The Empire Refineries has its district sales representative Homer F. Gay, formerly of the company's St. Louis office. The Transcontinental Oil Co. has a sales office with Charles M. Martin in charge.

Macon Has Plenty

Macon, Ga., has a great many distributors for a city of its size. The large companies are the Standard, Gulf, Texas, Pure through the Wofford of Georgia, and Pan American. Sinclair is going in. Among the local companies are the Hammond Oil Co., Flournoy Oil Co., Stewart Oil Co., Anderson Oil Co., and the Hadaway-Stokes Oil Co.

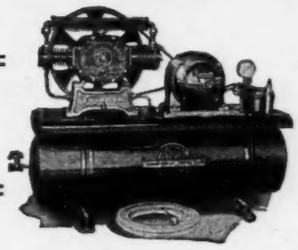
The Hammond has a club cost plus plan for selling gasoline Members of the club may get gasoline at the north Texas price of U. S. Motor as quoted in National Petroleum News, plus freight, tax, inspection fee, and a 3-cent margin.

The chief complaint of Georgia jobbers is against the practice of one of the larger companies in selling from bulk storage at tank car prices to dealers that will haul their own gasoline. Other dealers not equipped to haul gasoline expect discounts below the tank wagon prices and when they can't get them they become disgruntled with the jobbing companies, the latter say.

At Charleston, S. C., the large companies now in the field are the Standard of New Jersey, Gulf and Texas. Sinclair is building an ocean terminal but its products will be handled locally by the Charleston Oil Co., the oldest Independent in that historic city. Another Independent is the Economy Oil Co., managed by Ed Chisolm. The Gulf has been in the city a little longer than a year, and received its first shipment at its terminal June 20, 1925. This terminal has tankage for 450,000 barrels of oil products. It has barreling facilities, warehouse and loading racks. Its saving on shipments to Carolina points has

CHAMPION Air Compressors

Single Stage

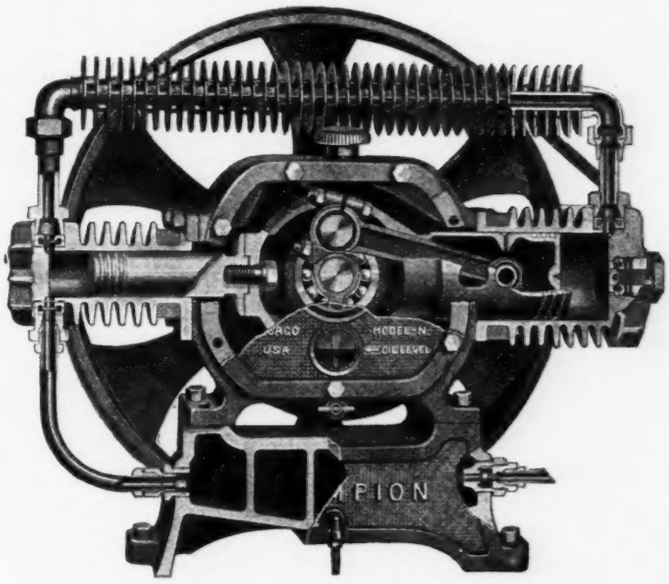


Two Stage

Built to last a lifetime, smooth and quiet in operation, no frictional losses, saves power and costs less per service hour.

The only compressor equipped with "Annular Ball Bearings", an exclusive feature of predominance.

If you are not thoroughly familiar with the new N Model —write for our special bulletin, gladly sent upon request.



Champion Pneumatic Machinery Co.
8168 South Chicago Ave. Chicago, U. S. A.

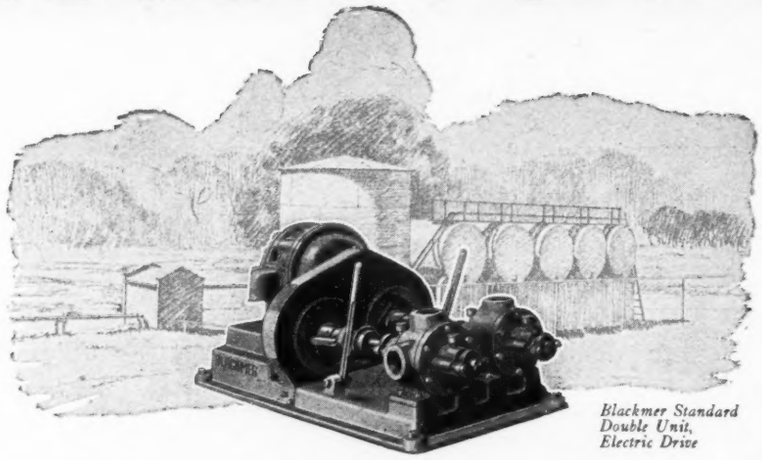
THE GEOLOGY OF PETROLEUM

is the name of the book written by William H. Emmons, which goes into detail describing the more important fields such as the Appalachian, Lima-Indiana, Illinois, Mid-Continent, Gulf Coast of Texas and Louisiana, Rocky Mountain, Canadian, Mexican and foreign fields.

It contains 610 pages, with 254 maps and illustrations, and may be purchased for $6 from—

National Petroleum News
824 Caxton Building Cleveland, Ohio

BLACKMER ROTARY PUMPS



Blackmer Standard Double Unit, Electric Drive

Built for the Bulk Station

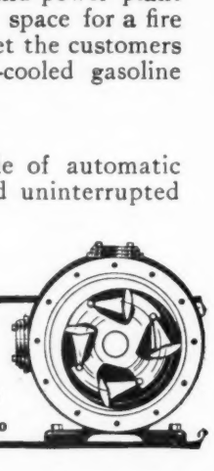
Now Blackmer offers the bulk station owner a unit especially suited to his needs and at a lower price, made possible by standardization.

The Standard Double Unit, pictured above, consists of two 100 G. P. M. Blackmer Pumps, with both suction ports on the outside, making piping easy. It is mounted with clutches and power plant on an extra-heavy cast iron base with or without space for a fire wall. Power may be either of three types, to meet the customers needs: electric motor, vertical water-cooled or air-cooled gasoline engine.

The Blackmer Principle

In this unit is incorporated the Blackmer Principle of automatic take-up-for-wear which makes possible the long and uninterrupted pumping service for which Blackmers are noted.

Write our nearest branch office for catalog and prices



BLACKMER PUMP Co.
Grand Rapids, (Formerly at Petoskey) Michigan

Chicago New York Buffalo Philadelphia Louisville New Orleans
Detroit Baltimore Atlanta Minneapolis Pittsburgh Kansas City
Boston Milwaukee Houston St. Louis San Francisco

"Oil Land Development and Valuation"

by R. P. McLaughlin

Petroleum Engineer and Geologist, formerly State Oil and Gas Supervisor of California.

It Tells you:

How to locate and space oil wells properly;
Method of drilling wells;
How to test wells;
How to gauge output of wells;
How to use production reports;
How to repair wells;
How to deepen wells;
Rules for abandonment of wells;
Methods of shooting wells;
How to evaluate oil wells;
Examples of repair work at oil wells;
Examples of efficient development of a new field.

200 *pages, pocket size, flexible, 59 illustrations.* $3.00. *Check with order.*

For sale by

National Petroleum News
817 Caxton Building, Cleveland, Ohio

been about 1 cent a gallon since establishing this terminal, T. W. Mathers, its superintendent, said.

The Texas terminal has been in operation more than 15 years. It is in charge of C. E. Lepley and shipments from Charleston go throughout South Carolina and parts of North Carolina, Georgia and Tennessee.

A. D. Willis is branch manager and J. C. King assistant branch manager for the Standard of New Jersey in South Carolina. Shipments through the South Carolina district are made from the Charleston refinery of the Standard. Shipments of crude and refined oils rank first at Charleston, supplanting fertilizer which for years held first place amounting to $40,000,000 worth annually.

Operations of oil companies at several points in North Carolina and Tennessee will be told about in a subsequent article.

Power Conference Will Meet Jan. 26

CHICAGO, Jan. 18.—The Midwest Power Conference, sponsored by several local sections of engineering societies, will be held in Chicago Jan. 26 to 29. It will consider the ways in which power resources, especially of the Midwest section, may best be developed. The latest developments in utilizing gas and oil for power production will be summarized.

Much of the program is devoted to hydro-electric resources and the burning of coal. The morning session of Jan. 29 includes several papers on diesel engines. Max Rotter, St. Louis, vice-president and engineer of the Busch-Sulzer Diesel Engine Co. will speak on "The Diesel Engine in the Industries;" Samual M. Vauclain, president of the Baldwin Locomotive Works, will discuss the diesel-electric locomotive; Allen H. Brewer, New York, consulting engineer of The Texas Co., will speak on "The Economics of Oil as a Boiler Fuel."

Sessions will be held in the Furniture Club of American rooms, 666 Lake Shore Drive.

Engineering societies that have joined in arranging for the conference are the American Institute of Electrical Engineers, American Society of Mechanical Engineers, American Institute of Mining Engineers, National Electrical Light Association, Western Society of Engineers and the National Safety Council.

CHICKASHA, OKLA.—Trammell Oil Co.'s business is reported to be increasing and the company is now operating five trucks and two light deliveries.

The company is at present pushing airplane gasoline, selling it at 25 cents, or 3 cents above U. S. Motor specification gasoline.

Painting of all the company buildings has just been completed and tanks and equipment are all set for the bad weather, according to C. W. Trammell, president.

Advertising and Sales Departments Make Close Harmony To Sell Oil

By J. C. Chatfield
N. P. N. Staff Writer

TULSA, Jan. 15

JOE DAWSON of the Southwestern Avertising agency at Dallas, recently gave his idea of a heaven for an advertising man.

"In the advertising man's heaven," he said, "there will be groups of two scattered here and there. One of each couple will be an advertising manager and the other will be a sales manager.

"Of course they will be playing heavenly music on their harps. But each man will not be playing his own tune on his own harp. Instead each sales manager will be playing on the same harp with the advertising manager and their combined efforts will produce real harmony."

Mr. Dawson told this little tale about heaven to illustrate the ideal relationship between advertising and sales departments of any company whether it be oil or moving machines. The ultimate aim of advertising is selling and from that standpoint both departments should work together in planning their activities.

The Marland Refining Co. has prepared a sales and advertising plan for 1926 which just about fits in with Mr. Dawson's idea of heaven. Ralph Dangerfield, manager of lubricating oil sales and Frank D. Brimm, advertising manager, are the chief authors of the plan although everybody at the general offices has had a finger in the pie during the course of its evolution.

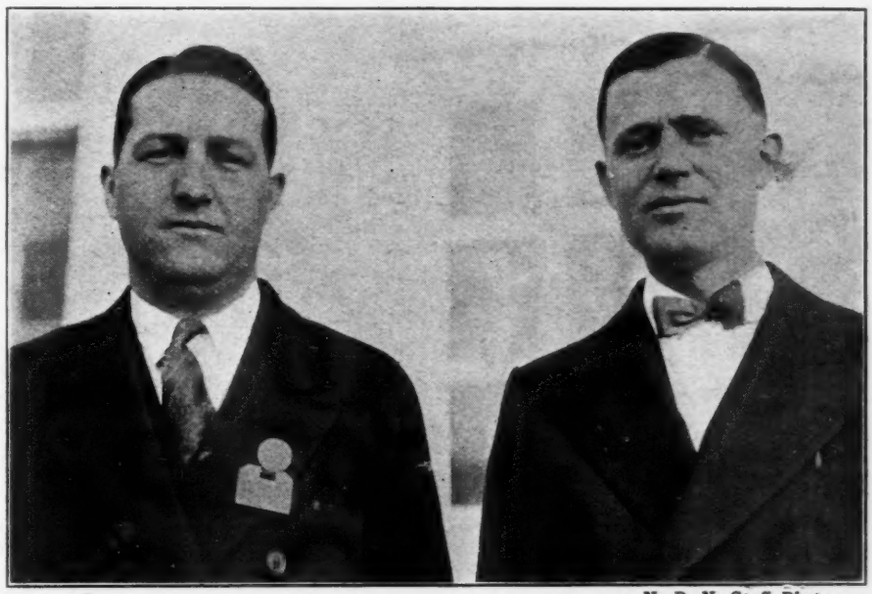
At the recent annual convention of the Marland retail marketing department, the plans were explained in detail to a representative group of salesmen who will be expected to help put it into effect.

Results of Trial

The plan made out a year in advance for 52 weeks of sales effort is a result of a trial made on a much smaller scale. About two years ago the company began an advertising campaign of a special oil for Fords. The advertising campaign was backed up with direct mail and personal calls on the trade as well as by sales effort on the part of station attendants. This campaign was largely confined to Oklahoma City territory.

Sales of Ford oil increased steadily month by month until in November, 1924, it reached 19,000 gallons, 11 months after the special oil was brought out. Beginning in 1925, the campaign was broadened to other points in Oklahoma where Marland does business.

Beginning in July letters were sent out to salesmen outlining a special campaign of advertising in August. Quotas were set for the salesmen to sell and special stress was laid on Ford oil throughout the month with the result that sales jumped up to 31,000 gallons, nearly twice as much as was sold through the retail marketing department in the previous November.



N. P. N. Staff Photo.

Fig 2. On left, Frank D. Brimm, advertising manager for the Marland Refining Co. with Ralph Dangerfield, manager of lubricating oil sales. Both strum the same harp.

The trial has convinced heads of the Marland distributing division that advertising backed up with special sales effort is the best way to obtain lubricating oil gallonage and with it increase sales of gasoline and burning oils.

52 Campaigns in '26

For 1926 the retail marketing department will be in the throes of a drive for business every week in the year. There are to be 52 specials as the advertising manager of a department store might term them. One week it will be Ford oil, another kerosene, and so on through the long list of industrial oils, cup greases, crank case draining and the like. Some campaigns deemed of greater importance than others will be carried on from two weeks to a month, the latter part of the campaign being in conjunction with new specials.

Tank truck drivers, service station attendants and all other salesmen in the retail marketing department will have a part to play in each campaign, a goal to reach and a reward to win in competition with other men.

At the convention mentioned above Mr. Brimm displayed a chart showing the proposed activities of his department for one month. Four advertisements were shown. One was on crank case draining, another on Ford oil, one on service to customers featuring cleanliness at drive-in stations and a fourth on gasoline, featuring the selling of a full tank.

At the same time the department will be running farm paper advertisements one of which will be a message to road contractors and construction companies and the other on Ford oil.

These activities of the advertising department will tie into the following which will be co-ordinated by division and department headquarters: mailing of copies of all advertisements to all field men in advance of the time they are to appear in newspapers and farm papers; a letter from the superintendent to station men on cleanliness at stations; a letter to the mechanical trade on tractor oils and Ford oil; a letter to all resale customers on stocking Marland motor oils; the working out of contests among employees on draining crank cases; bulletins from department headquarters to station men on selling a full tank of gasoline and a demand that stations be clean to tie up with the service advertisement on cleanliness.

While service station men are giving attention to the things mentioned above, agents and salesmen will be expected to make a special campaign on all companies engaged in road work and building activities and push the sale of motor

RHODES
IMPROVED
MOTOR OIL DISPENSERS
You Can Make Oil Profits Climb with
RHODES DISPLAY RACKS

Motor Oil, carrying the "bread and butter profit" of the filling station, is deserving of strong selling effort. Dispensing equipment which attractively displays motor oil is a big factor in the selling process.

Made in Two Sizes

The Rhodes Motor Oil Display Rack attractively displays the oil bottles in the most conspicuous place in your station. Acting as a reminder of the need for oil and promising quick service, *Rhodes Racks make oil profits climb.*

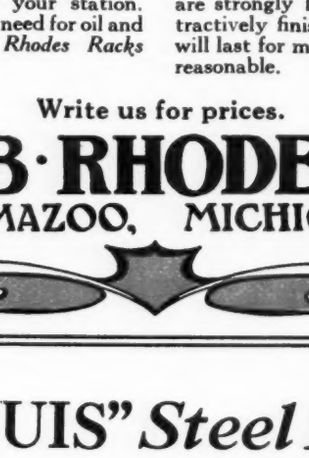
Rhodes Racks may be had in 3 set (24 bottle) or 5 set (40 bottle) capacity. They are strongly built of angle iron and attractively finished in green enamel. They will last for many years. Prices are very reasonable.

Write us for prices.

JAY B. RHODES Co.
KALAMAZOO, MICHIGAN.

"ST. LOUIS" *Steel Barrels*

"ST. LOUIS" SERVICE



"ST. LOUIS" QUALITY

Two vital facts to consider when placing future business

ST. LOUIS STEEL PACKAGE CO.
Natural Bridge and Goodfellow
St. Louis, U.S.A.

oil and Ford oil to follow up the special sales letters which have gone forward previously.

Sales Helps

One feature of the plan which is particularly worthy of note is the method which the company is to follow to have the specials pushed by salesmen in the most intelligent possible manner. In the week previous to the time when the special is to be offered, the general and division offices will send each salesman a copy of all advertising which is to be used. With it will come a letter giving all material facts for a genuine sales talk so that when Monday morning comes each salesman will be able to start out with a full knowledge of the product he is to feature along with his general line.

Another feature is that during the week before the special is offered prospects will receive a sales letter with a pamphlet enclosed, followed by a broadside folder giving additional sales arguments in a striking manner.

Immediately after the first of the year Marland will advertise to the public for the first time the "Germ Process" oils which will be sold under a new trade name of "Marland Super Oils." The word super in connection with any Marland oil will describe it as being made by the germ process.

Germ Process

It will be remembered that three years ago Marland bought the patent rights to the process for north America. The process was developed by Henry M. Wells and J. E. Southcomb in England during the war but patent papers were sealed up by the war department until the war was over.

The process is designed to increase the "oiliness" of the oil by reducing its surface tension so that it will spread more quickly on metal surfaces. Oils manufactured by the process have been sold without mention by the company for an extended period.

As an illustration of the advertising methods to be followed by the retail marketing department newspaper advertisements will cover the territory to announce the germ process oils. A "broadside" folder will be mailed direct to prospects and customers as a follow up to a previous sales letter which will include a smaller "stuffer." Methods followed each week during the year will be similar to that, although probably not so startling since no company can have a new process or new discovery to talk about every week.

In the seven states in which it does business as a marketer and in other territory where jobbers sell Marland trademarked oils and Marland gasoline under that name, the company is using 104 newspapers and a number of farm papers with a combind circulation of around 1,000,000.

Oil Patents Issued Recently

Production

Fishing Tool. — William E. Davison and William B. Marshall, Fellows, Cal. Filed Sept. 5, 1923. No. 1,568,808.

Circulating Plunger Pump.—William M. McGee, Santa Monica, Cal. Filed Dec. 2, 1924. No. 1,568,857.

Refining

Method of and Apparatus for Effecting Continuous Distillation.—Francis M. Hess, Whiting, Ind. Filed Dec. 29, 1921. No. 1,568,157.

Recovery of Aluminum Chloride.—Almer McDuffie McAfee, Port Arthur, Tex., assignor to Gulf Refining Co. Filed Jan. 25, 1922. No. 1,568,171.

Process of Making Chlorides.—George L. Prichard and Herbert Henderson, Port Arthur, Tex., assignors to Gulf Refining Co. Filed Nov. 17, 1921.

Oil Still.—John Primrose, New York, assignor to Power Specialty Co. Filed July 2, 1921. No. 1,568,182.

Apparatus for Cracking Hydrocarbon Oils.—Carbon P. Dubbs, Wilmette Ill., assignor to Universal Oil Products Co. (Dubbs) Chicago. Filed Feb. 4, 1925. No. 1,568,400.

Method for Treatment of Low-Boiling Hydrocarbons. — William F. Downs, Chatham, N. J. Mary Garden Downs administratrix. Filed May 6, 1922. No. 1,568,812.

Process for Purifying Hydrocarbon Liquids.—William F. Downs. Filed May 6, 1922. No. 1,568,813.

Process for Refining Hydrocarbons.—Jacque C. Morrell, Chicago, assignor to Universal Oil Products Co., (Dubbs). Filed April 27, 1923. No. 1,568,904.

Machine for Pumping Fluids from Wells. — Alvin H. Low, Los Angeles. Filed July 21, 1923. No. 1,568,516.

Well Pumping Machine. — John B. Hawley, Jr., Fort Worth, Tex. Filed May 8, 1924. No. 1,568,836.

Deep Well Pump.—Valoris L. Forsyth, Fort Worth, Tex. Filed Dec. 10, 1924. No. 1,568,447.

Foreign Opportunities

Reserved information may be obtained from the Bureau of Foreign and Domestic Commerce, Washington, and its district and cooperative offices by duly registered firms and individuals upon written request by opportunity number. The Bureau does not furnish credit ratings or assume responsibility as to the standing of foreign inquirers; the usual precautions should be taken in all cases, and where no references are offered it does not necessarily imply that satisfactory references could not be given. Correspondence may be in English unless otherwise stated.

18531.—**Asphalt**, Hamburg, Germany, purchase and agency.

18558.—**Lubricating oil**, Alexandria, Egypt, agency.

18630. — **Petroleum products**, Melbourne, Australia, agency.

18635.—**Paraffin wax**, Bayreuth, Germany, purchase.

18655.—**Oils**, Johannesburg, South Africa, purchase.

18674.—**Paraffin wax**, Hamburg, Germany, agency.

18676.—**Asphalt and road oils**, Milan, Italy, agency.

18688.—**Paraffin wax**, Shanghai, China, purchase.

18709.—**Lubricating oils**, Alexandria, Egypt, agency.

18712.—**Gasoline**, 10,000 tons, London, England, purchase.

To consistently hold the good will of the motoring trade during the cold days of winter is not so easy. Those jobbers and dealers who are handling
KANOTEX
Petroleum Products
have no worry along that line.
Kanotex Gasoline is an ideal winter fuel. It is straight run and fully treated making it quick starting on account of its high volatility. We are also able to furnish a higher gravity (64-66) gasoline to those who have the demand.
THE KANOTEX REFINING CO.
A. F. MORRISON, Sales Manager
Phone L. D. 4, Arkansas City, Kansas
KANOTEX

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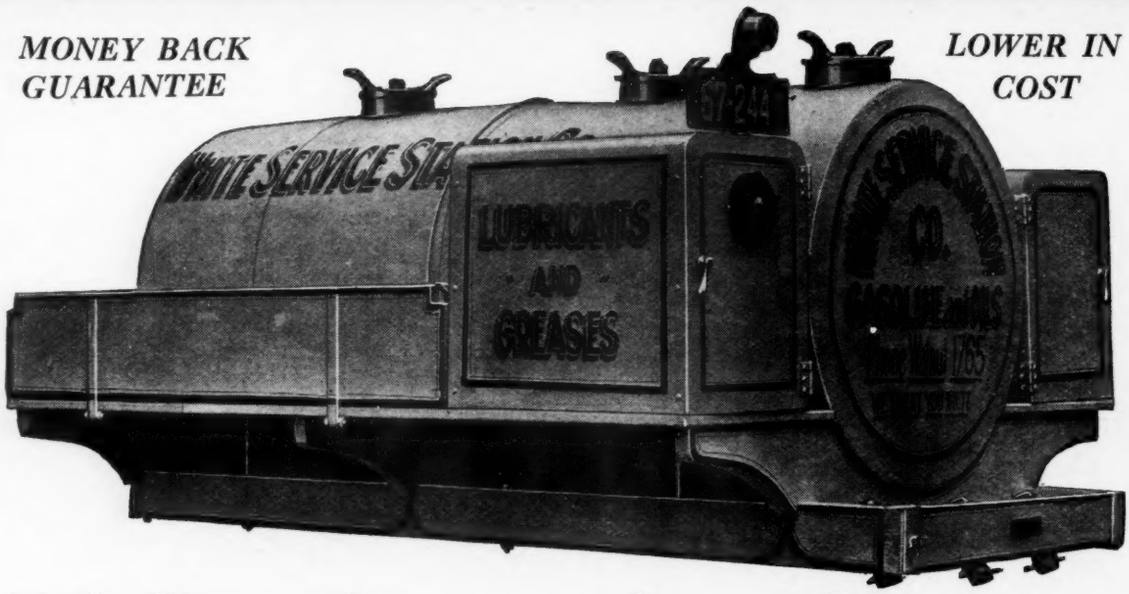

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Missouri Drops Standard Ouster But Files Suit Involving Fines

By Ward K. Halbert
N. P. N. Staff Writer

CHICAGO, Jan. 16

MISSOURI'S ouster suit against the Standard Oil Co. of Indiana which almost died of its own weight since it was filed in 1924, has been revived with a new impetus. Technically, it is not a resurrection of an old case but the starting of a new one; however, the allegations are substantially the same.

The legal maneuver took place when N. P. Gentry, state's attorney, brought about the dismissal of the ouster suit instigated by his predecessor, J. W. Barrett. Immediately thereafter Mr. Gentry filed a new "information." Thus far the Missouri courts have not obtained official service on the Standard Oil Co. Standard's lawyers understand, nevertheless, that there are only two important differences between the old suit and the new. The differences are as follows:

(1) The old case was directed against the Standard Oil Co. of Indiana alone while there are four defendants in the new case. They are: The Texas Co., the White Eagle Oil & Refining Co., and Standard Oil Co. of Kentucky besides Standard Oil Co. of Indiana.

(2) The court may, if it finds the defendants guilty of the charges in the new case, fine them. The old case was such that the court had no alternative but to oust the Standard Oil Co. from the state if found guilty.

Penalty Too Severe

Mr. Gentry in discussing the move is quoted as saying that his objection to the old case was that it did not allow the court any alternative save to oust the defendant in the event the state's charges were sustained. He is said to be of the opinion that the court might be reluctant in finding the oil company guilty if such a decision meant positively that it would be denied the right to do business in the state, because the punishment would be rather severe in view of the alleged offense.

The old case, filed by Mr. Barrett on Sept. 12, 1924, in the Missouri supreme court, charged the Standard Oil Co. with operating a monopoly on gasoline and other oil products through certain restrictive clauses in the Burton cracking process license. That petition sought to invoke an old suspended sentence against the Standard Oil Co., passed many years ago but still hanging over the company's head in that state.

It is unnecessary to review that ancient case here but it appears that a number of years ago the Standard Oil Co. was hailed into court in Missouri on a monopoly charge and found guilty. The sentence included both fine and ouster. The fine was collected but the ouster was suspended and the company permitted to stay "during good behavior," so to speak. Barrett wanted to invoke that ancient decree but Gentry thought it more advisable to start a new suit carrying substantially the same allegations.

The information filed in the Missouri supreme court is only five or six pages long while the petition filed by Barrett in 1924 was a ponderous document of several hundred pages, embodying all the licenses held by refiners in Missouri to use the Burton cracking process, all rights to which are held by Standard Oil Co. of Indiana.

This action in Missouri is the latest in a series of assaults upon the oil industry growing out of the unusual performance of the National Association of Attorneys General, when that group of legal lights met in Minneapolis on Aug. 27, 1923. It was there that state attorneys of several middle western states deliberated, decided an oil monopoly existed, and hatched up means of breaking it up.

Ghosts of N. A. of A. G.

After their Minneapolis meeting where Mr. Barrett and Ora S. Spillman of Nebraska were the moving spirits, the attorneys general went home each pledged to start something against the oil industry. Spillman's spectacular failure has been recorded in many pages of type in National Petroleum News. Mr. Barrett's "stunt" was to oust the Standard from his state. It afforded much political "flash pan" material but for some reason it did not work so well for Mr. Barrett's political aims as it did for some of the others. Some people think it hurt Barrett politically.

When he started the ouster proceeding in 1924 he got the wrong kind of publicity. Newspapers discussed the subject editorially but they were not all for kicking the Standard out of Missouri. Some of them went so far as to wonder how the people of Missouri could get along if all Standard Oil Co. filling stations closed. Other newspapers had the nerve to ask what good it would do to oust the Standard, even if it didn't do any harm. And Mr. Barrett is now in private life, not having been elected to anything since.

This aspect of the situation may be the "nigger in the wood-pile" at Jeff City now. Mr. Gentry may figure himself better luck by squeezing a good sized fine out of the Standard Oil Co., and the three other defendant companies than by trying to eject them from the state and let the voters hunt for gasoline. But that is only a guess. Mr. Gentry is a public servant and no doubt thinks he is serving his "peepul" conscientiously.

Chance to Fine Them

On the face of the thing the new move of the administration in Missouri looks like making an opportunity to exact money from four big oil companies in case certain technical allegations against them can be substantiated. George S. Allee, secretary of the Missouri Oil Men's Association, recently discussed this matter in his official bulletin to the members as follows:

"The whole thing hinges on a clause in the Burton process license, a clause that has not been used nor enforced and has not increased nor decreased the Standard Oil Co.'s gasoline gallonage in Missouri one gallon. Would it not have been much better to have asked the offending companies to rewrite their contracts, striking out the objectionable clause, than to mulct them with a heavy fine?"

Standard Oil Co. attorneys in Chicago say they have no idea why the list of defendants was increased. The Standard Oil Co. of Kentucky is a lessee of the Burton cracking process but it does not do business in Missouri; moreover, it has no legal right to do business in Missouri, never having attended to the formality of obtaining such a privilege. The company may ship car loads of oil products through or into Missouri in interstate commerce but that does not make the company subject to the laws of the state.

The Texas Co. and the White Eagle Oil & Refining Co. do a distributing business in Missouri but The Texas Co. has its own cracking process. The relation of the White Eagle to the case is that the company is one of a large number of lessees using the Burton process. Where The Texas Co. gets on is a more remote connection, probably perfectly clear in Mr. Gentry's mind.

The case, as started by Barrett, is in rather bad shape just now, according to Mr. Allee.

"During the hearing under Barrett's administration," he says, "witnesses were called to Jefferson City but no provisions ever were made to pay their expenses, nor did the state pay the judge nor the court reporter for their services. Something like $2,000 in costs were left unpaid and an appropriation bill will have to be passed by the state legislature in 1927 before any of the court costs can be met."

Marketers Experiment as Owners of Louisville Cracking Plant

A JOBBER owned refinery! That is a proposition that is attracting the attention of a large number of members of the National Petroleum Marketers' Association and also many Independent refiners from whom Association members now buy their gasoline.

The N. P. M. A. proposal has been under discussion for less than a year and in the meantime, or perhaps for some months longer, a cracking plant similar to that suggested for the N. P. M. A. members, has been operating at Louisville, Ky.

The Louisville cracking plant is that of the Louisville Petroleum Refining Co. projected about two years ago and which has been turning out gasoline from two cracking stills since early last year.

Industrialist Heads Company

The Louisville company is headed by W. M. Mitchell as president and general manager. Mr. Mitchell was not an oil man but was engaged in several industrial enterprises in and around Louisville. He built one of the railroad bridges across the Ohio river at Louisville and the terminal railroad serving the industries at Louisville and across the Ohio at New Albany and Jeffersonville, Ind.

Other officers are C. C. Fix, Louisville, vice president, and F. A. Murphy, secretary and treasurer. These men are assisted by a board of directors several of whom are directly engaged in the distribution of petroleum products. The directorate is made up of R. R. Hart, Knox Oil Co., Mt. Vernon, O.; F. M. Morrison, Accurate Measure Oil Co., Columbus, O.; A. B. Caldwell, Caldwell & Taylor, Cincinnati; R. J. Brown, R. J. Brown Petroleum Co., St. Louis; and these Louisville men: E. G. Isaacs, John A. Walthen, and D. B. G. Rose.

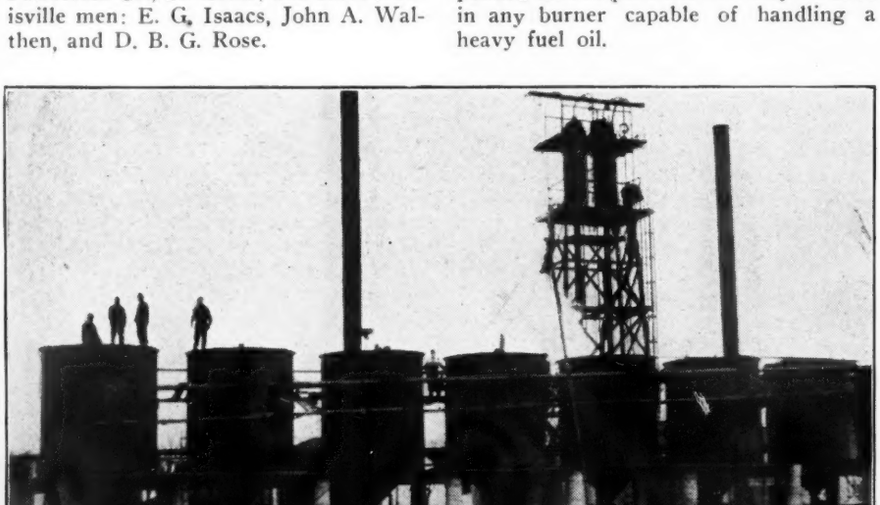
The refinery is superintended by J. W. Johnson, who came to the Louisville company when the Great Southern Refining Co. dismantled its plant at Lexington, and sales are in charge of H. B. Hammond, who was in the oil brokerage business in Louisville.

The refining company bought a site along the Ohio river just below Louisville, adjacent to a new Ford assembly plant. Two Dubbs cracking units were installed and the plant was so laid out that expansion can be made without changing the present layout. One steam still was set up at the beginning for the finishing of gasoline and another still is now being set. There are four 150 horsepower Walton boilers burning fuel oil, the residue from the cracking stills. A well equipped machine shop is part of the equipment.

Settling Out Carbon

One of the problems that were confronted after the plant got into operation, was the residue oil from the cracking stills. It contained a large amount of free carbon which would clog the ports of burners. It was found that the carbon could be settled out. Mr. Mitchell devised a series of eight settling tanks and the settling is a continuous process.

The accompanying picture shows how the tanks have been erected on concrete supports. Oil from the stills is pumped into the tank on the extreme right. The coarser carbon settles out and the remaining oil is then pumped into the second tank where more is settled out. So on until the oil has passed through all eight tanks. By the time it reaches the eighth tank it is practically free of suspended carbon particles and may be used in any burner capable of handling a heavy fuel oil.



Battery of continuous settling tanks for separating suspended carbon particles from residual oil from cracking stills at Louisville Petroleum Refining Co.'s plant.

H. B. Hammond, sales manager, and J. W. Johnson, refinery superintendent, of Louisville Petroleum Refining Co., Louisville, Ky.

The tanks have sump bottoms with outlet high enough above the ground to permit a truck to drive under. The outlet valve may then be opened and the settlings allowed to run out.

Has Plenty of Water

Semi-continuous agitators are used. Plenty of water for the condensers and boilers comes from a well on the refinery site and has a temperature of around 55° F. the year around.

Charging stock is shipped in by tank car from the Mid-Continent or by barge from central Kentucky refineries down the Kentucky river and up the Ohio. So far no effort has been made to ship gasoline out by barge because most of the company's present customers cannot be reached by water.

Plans are now afoot for gradual expansion. A few alterations have already been made to increase the output and shorten the length of cycle of each batch of oil through the cracking stills. The plant is regarded as an interesting experiment of an exclusive cracking plant that operates wholly on the product of other refineries. Feasibility of this type of plant is yet to be thoroughly tested but the Louisville company is prepared to install crude stills quickly if they should become necessary, officers and directors say.

Ohio Jobbers' Meeting To Have Exhibits

COLUMBUS, O., Jan. 19.—The annual convention and equipment exhibit of the Ohio Petroleum Marketers' Association will be held at the new Neil House, Columbus, on Feb. 11 and 12.

The equipment exhibit is being added to the convention this year due to an almost unanimous demand, according to W. C. Hughes, secretary. A blue print of exhibit spaces has been mailed out. All booths are 6 by 10 feet and will cost $50 each. Reservations for space were to be mailed Mr. Hughes at 616 Commerce Bldg., Columbus, before Jan. 20, and $20 must accompany the application.

The Association has made rapid strides within the last year, increasing its membership more than 600 per cent over 1924, and a large attendance is being looked for at the coming convention.

Prairie Pipe Line Shipments Largest Since 1922

TULSA, Jan. 15.—Shipments of the Prairie Pipe Line Co. increased 331,257 barrels in December as compared with November, and were higher than they have been at any time since last August. In December, shipments totaled 4,182,026 barrels, as against 3,850,769 barrels in November. This was a daily average of 134,904 barrels for December, or 6545 barrels more than the daily average recorded in November.

During all of 1925, the Prairie shipped a total of 52,392,472 barrels of crude through its lines to the east, or an average of 143,541 barrels daily. This is the largest total recorded since 1922, when approximately 57½ million barrels were shipped. For the first eight months of 1925, the shipments were more than four million barrels a month, and the lowest figure of the year was reached in September, when shipments fell to 3,688,343 barrels.

The appended table gives shipments of the Prairie Pipe Line Co. and daily averages for 1922, 1923, 1924 and 1925.

	1922 Shipments	Daily Average	1923 Shipments	Daily Average	1924 Shipments	Daily Average	1925 Shipments	Daily Average
January	4,655,217	150,168	5,085,840	164,059	3,942,645	127,182	4,441,290	143,268
February	4,115,761	146,991	4,572,411	163,300	3,475,176	119,830	4,322,556	154,377
March	3,947,186	127,328	4,093,019	164,291	3,688,715	118,997	4,923,929	158,836
April	3,945,903	131,530	5,067,247	168,908	3,747,013	124,900	4,415,855	147,195
May	4,507,751	145,411	4,872,747	157,185	3,658,266	118,009	4,719,835	152,253
June	4,099,748	136,658	4,762,868	158,762	3,547,891	118,263	4,716,115	157,204
July	4,388,516	141,565	4,469,311	144,171	3,617,585	116,696	4,822,612	155,568
August	5,484,508	176,919	3,536,928	114,094	3,353,251	108,169	4,318,497	139,306
September	5,721,142	190,705	2,874,693	95,823	3,024,324	100,811	3,688,343	122,945
October	5,868,017	189,291	2,500,871	80,673	3,329,588	104,503	3,990,645	128,730
November	5,573,757	185,792	2,650,566	88,352	3,502,938	116,765	3,850,769	128,359
December	5,170,889	166,803	4,162,760	134,283	3,857,754	124,444	4,182,026	134,904
TOTAL	57,478,390	157,475	49,649,261	136,025	42,745,146	117,100	52,392,472	143,541

Southeastern Railroads Ignore Challenge

WASHINGTON, Jan. 15.—Attorneys for railroads in the southeast, while making an answer to the petition of the attorneys for the Piedmont Oil Co., Gastonia, N. C., asking the Interstate Commerce Commission for further hearing in that company's complaint against rates on gasoline from Hodge and Fort Worth, Texas, to Gastonia, have ignored the challenge of the Piedmont's lawyers for a delving into the question of the reasonableness of petroleum rate structure in the southeastern part of the country.

The railroad attorneys' answer to the Piedmont attorneys, in effect, is "old stuff." That is to say, they assert that the Piedmont's lawyers have presented nothing that was not before the regulating body when it came to its conclusion that the Piedmont complaint should be dismissed.

The railroad lawyers have ignored the challenge although it was based on an implication, deducible from language in the commission's decision that, if the Piedmont had challenged the reasonableness of the rates to the southeast, a different conclusion might have been reached.

This Piedmont case (see National Petroleum News Jan. 6, Page 41) is the one in which the commission refused to consider the quality of the rates to Gastonia because the whole structure was not attacked, beyond the narrow confines of the allegation that the rates from Fort Worth and Hodge to Gastonia were unreasonable. However, the commission will be forced into consideration of the quality of the whole structure by the case that has already been filed and one the Transcontinental Oil Co. will file. It is suggested the railroad lawyers declined to answer the suggestions in the Piedmont case, for an enlargement of the issues therein, because they knew of the contemplated Transcontinental complaint.

New Safety Picture Points a Moral

Staff Special

TULSA, Jan. 14.—Ray Miller, director of the Petroleum Safety Council, announces that he has just completed a new safety motion picture, which will start on its long journey through the Mid-Continent field Jan. 20. It will make its premiere in Arkansas and will proceed through Louisiana, Texas, Oklahoma and Kansas in the order named. The picture has been named "Your Job," with the intriguing sub-title, "Are you its master or slave?" It tells its story in three reels.

This picture presents a new idea in safety films, in that it shows a contrast between two different types of oil country leaders, pointing a moral as to personal characteristics as well as to safety practices. One of the men in the picture is a wide-awake, hustling farm boss with a happy, genial disposition and a believer in looking out for the safety of himself and his men in the field. He is shown showing the men how to avoid accidents and pointing out to them the seriousness of allowing avoidable accidents to occur. He is popular with everybody, likes his job, never has an accident on his leases, and is evidently pointed for higher things in the company's organization.

The other man, shown as a construction foreman in a refinery, is a grouch. He is sore at the world in general, hard-boiled, doesn't like his job, and doesn't believe in all this foolishness about safety. His idea is to curse the men for getting hurt and to tell them that they ought to watch what they are doing. Needless to say he is not popular in the refinery yard. He finally gets hurt himself through his own carelessness and loses his job. Moral:—be cheerful and watch your step.

Shipping Board Buys Fuel Oil at Low Price

By Special Correspondent

WASHINGTON, Jan. 15.—In its annual report to congress, the United States Shipping Board asserts that, in the year ended June 30 last, it bought the fuel oil used by the American merchant marine, 16,997,556 barrels, for $28,501,471, or $2,954,484 less than if bought in the open market. It said that nearly all contracts for fuel oil were made in the home office in Washington and that uniformly, whether in the home or foreign market it saved money by reason of having made the contracts, for $2,218,308 at Atlantic and Gulf ports; $547,576 at Pacific coast ports, $101,000 at European ports and $87,600 at Asiatic ports.

The board attributed its ability to obtain oil at less than the open market price to the fact that it had fuel oil in tanker storage, thereby giving them profitable employment and by then using the tankers as bunker stations wherever the open market price was above the contract price. It cited that when the open market price at San Francisco went above the contract price a bunker station was opened at that port, fuel oil under the cargo contract at San Pedro being used to supply the San Francisco station.

Michigan Oil Men to Meet

DETROIT, Jan. 14.—The Michigan Independent Oil Men's Association will hold its annual meeting at the Hotel Statler, Detroit, Jan. 21 and 22, according to the announcement in "Flash Points," the paper put out by James A. Gilmore, secretary of the association. An exposition of equipment used by oil jobbers will be one of the features of the meeting and the election of officers for the coming year will take place.

State Department Protests New Land Legislation of Mexico

Staff Special

WASHINGTON, Jan. 15

REPRESENTATIONS about the crooked character of the recent oil and land legislation of Mexico have been handed to the Mexican government by Ambassador Sheffield. They are described as formal. That being so they are to be taken as indicating that, in phraseology at least, the government of the United States is prepared, in homely phrase, to go to the mat with the Mexican government.

In answer to the representations the Mexican ambassador here and the Mexican foreign minister in Mexico City have protested that nothing unfair will be done to Americans. The Mexicans, as usual, have indicated that they are a sovereign nation and therefore will make such legislation as they please and God forbid that anyone should even intimate they should think of stealing anybody's rights.

There is not a thing new in the matter, except the intimation that Ambassador Sheffield may be recalled and diplomatic relations broken off, as they were until 1923. That intimation is given in the indirect left-handed form of diplomacy in the form of a hope that it will not be necessary to sever diplomatic relations. The only other phase that might be called new is that contained in the fact that the government is willing to have it known that the representations that have gone forward are formal. Heretofore remarks of similar tenor have been informal and therefore, in diplomatic theory not so serious as those now made.

Would Hit Hearst

It is estimated that $500,000,000 is the value of the American property placed in danger, including the ranch of William Randolph Hearst, which is of a size equal to three or four American counties. The pinkish public-ownership folk in Mexico seem to have enacted into statute, for use south of the Rio Grande, some of the ideas his editorial writers north of that stream have approved for use in the United States.

Manuel C. Tellez, the Mexican ambassador in Washington, in a statement given out as comment upon the announcement by the state department that formal representations had been made indicated that, as he saw the matter, there was simply disagreement between the governments as to the meaning of what had been done and that the important part of the matter would be the regulations adopted under the petroleum part of the statute; that is to say, as to how the statute would be administered.

That is admitted. The statute can be administered so as to deprive Americans of their property, or it can be worked otherwise. The point the state department makes is that it objects to legislation which can be worked in a confiscatory manner. In his statement Tellez said the best minds in Mexico were working on those regulations. He said:

"Mexico has recognized the importance in its relations with the United States of the agreements of 1923," said the ambassador. "There interpretations and the completion of the understandings then arrived at may, of course, differ, but Mexico has carried through in exemplary fashion the two mixed claims conventions which grew out of the 1923 negotiations, and there has never been reason to believe that she would not completely fulfill any commitments made at the time or any other matter within the agreements.

"Regarding the filing of representations with the Mexican government, there is of course a difference between formal protest for any act which may have been committed, and a recording of a difference of opinion over matters in process of being carried out. In the matter of the petroleum and land laws, it is to be remembered that the laws became finally effective only when the executive decrees regulating them are pronounced. The best minds of Mexico now are working upon those regulations and they may be expected at the earliest moment to be compatable with sound statesmanship, the Mexican government will not issue hurried regulations but desires to have the finished regulations ready as soon as possible.

"Foreign Minister Saenz has made formal announcement to the press assuring the public that the laws as regulated will be friendly to existing property rights in Mexico. The rights of foreigners are defended by provisions of the Mexican constitution, and the present laws naturally cannot vitiate those rights."

Continental Supply Co. Issues Catalogs

TULSA, Jan. 14.—Continental Supply Co., St. Louis, is sending to the trade three additions to its general catalog. It is the company's custom to send these inserts in the form of small catalogs covering different classes of articles, to be placed in the company's general catalog to supersede older ones. The inserts are equipped with binders by which they can be fastened in the large volume.

One of the new revisions deals with tubular goods, and contains specifications, weights, dimensions, and other information relative to boiler tubes, casing, coupling, drill pipe, drive pipe, tubing, line pipe, and wrought steel pipe. An interesting picture shows a view of the main plant of the Youngstown Sheet & Tube Co., and another shows a view of the Indiana Harbor plant of the same company.

Packers and plugs comprise the contents of another insert, consisting of 20 pages. A large variety of packers are shown, with brief notes giving the uses of each kind, and with details as to weight, size, and price.

The third insert covers boiler and engine trimmings and is 22 pages long. It covers such articles as injectors, jets, cocks, ejectors, lubricators, gauges, governors, oil cups, relief valves, safety valves, etc.

Board Now Reading Survey of Oil

Staff Special

WASHINGTON, January 15.—The digest of the oil industry's answers to the questions put to it by the Federal Oil Conservation Board, prepared by the members of the board's advisory committee of technical men, has been submitted by Secretary Work, chairman of the Board to his colleagues, Secretaries Davis, Wilbur and Hoover. When they read it they will plan for the public hearings which Secretary Work hoped would be held the latter part of this month.

Ten questionnaires were submitted to representative oil men by the Board and the technical advisory committee spent months in studying the replies. All phases of the industry were inquired into and the replies have been compressed into statements covering the 10 distinct phases embraced in the inquiry.

After the Board members have completed their study of the digest and the public hearings have been held, a final report will be made by the Board to the President and Congress, setting forth past and present conditions in the industry and making recommendations for the future.

Paul Gage Resigns

DALLAS, Jan. 14.—W. Paul Gage, who for some time past has been general manager of the Pure Oil Pipe Line Co., has resigned, following assumption of control of that company by the Prairie Pipe Line Co., effective Jan. 1. Mr. Gage has not yet announced his plans for the future, except that he will attend the Los Angeles meeting of the American Petroleum Institute, returning by way of the Panama canal with a stopover at Havana. Before going with the Pure Oil Co., Mr. Gage was vice-president and general manager of the Lone Star Gas Co., with headquarters in Fort Worth and later in Dallas.

Refinery Products Directory

Gasoline and Naptha

ILLINOIS

8-60 U. S. Motor Gasoline
Indian Refining Company, Lawrenceville, Ill.

68-70 Straight-run Gasoline
Ashland Refining Co., Ashland, Ky.

NORTH LOUISIANA

58-60 U. S. Motor Gasoline
Caddo Central Oil & Refining Co..Shreveport,La.
Shreveport Prod. & Refg. Co., Shreveport, La.

OKLAHOMA

50-52 450 E. P. Naphtha
Cameron Refg. Co., Ardmore, Okla.

56-58 450 E. P. Gasoline
Cameron Refg. Co., Ardmore, Okla.

58-60 U. S. Motor Gasoline
Cameron Refg. Co., Ardmore, Okla.

60-62 400 E. P. Gasoline
Altitude Petroleum Co., Tulsa, Okla.

68-70 350 E. P. Gasoline
Altitude Petroleum Co., Tulsa, Okla.

PENNSYLVANIA

50-52 Naphtha
Emery Mfg. Co., Bradford, Pa.

54-56 Naphtha
Emery Mfg. Co., Bradford, Pa.

58-60 Gasoline
Carnegie Refg. Co., Carnegie, Pa.
★Continental Refining Co., Oil City, Pa.

58-60 Straight-run Gasoline
Emery Mfg. Co., Bradford, Pa.

60-62 Straight-run Gasoline
Emery Mfg. Co., Bradford, Pa.

62-64 Straight-run Gasoline
Emery Mfg. Co., Bradford, Pa.

64-66 Straight-run Gasoline
Emery Mfg. Co., Bradford, Pa.

68-70 Straight-run Gasoline 305-320 E. P.
Emery Mfg. Co., Bradford, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.

70-72 Straight-run Gasoline 300-305 E. P.
Emery Mfg. Co.. Bradford, Pa.

68-70 Blend, 425-430 E. P.
★Continental Refining Co., Oil City, Pa.

Natural Gasoline

OKLAHOMA

Grade A
Altitude Petroleum Co., Tulsa, Okla.

Burning Oils

NORTH LOUISIANA

41-43 Water White Kerosene
Caddo Central Oil & Refining Co.,Shreveport,La

OKLAHOMA

41-43 Water White Kerosene
Cameron Refg. Co., Ardmore, Okla.

42-44 Water White Kerosene
Altitude Petroleum Co., Tulsa, Okla.

PENNSYLVANIA

45 Water White Kerosene
Carnegie Refg. Co., Carnegie, Pa.
★Continental Refining Co., Oil City, Pa.
Emery Mfg. Co., Bradford, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.

46 Water White Kerosene
Emery Mfg. Co., Bradford, Pa.

Neutral Oils

ILLINOIS

180 Vis. No. 3-3½ Asso. Filt.
★Indian Refining Company, Lawrenceville Ill.

180 Vis. No. 5 Asso. Filt.
★Indian Refining Company, Lawrenceville, Ill

PENNSYLVANIA

150 Vis. No. 3 Asso. Filt.
Emery Mfg. Co., Bradford, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.
Seneca Oil Works, Warren, Pa.

150 Vis. No. 4½ Filt. (Red)
Crystal Oil Works, Oil City, Pa.

180 Vis. No. 3 Asso. Filt.
Carnegie Refining Co., Carnegie, Pa.
Emery Mfg. Co., Bradford, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.
Seneca Oil Works, Warren, Pa.

200 Vis. No. 3 Asso. Filt.
Carnegie Refining Co., Carnegie, Pa.
Emery Mfg. Co., Bradford, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.
Seneca Oil Works, Warren, Pa.

34 Gravity 350-360 Flash
Carnegie Refinery Co., Carnegie, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.

Cylinder Oils

PENNSYLVANIA

600 Steam Refined
Crystal Oil Works, Oil City, Pa.
Emery Mfg. Co., Bradford, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.

635 Steam Refined
Emery Mfg. Co., Bradford, Pa.

650 Steam Refined
Emery Mfg. Co., Bradford, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.
Seneca Oil Works, Warren, Pa.

600 Flash Steam Refined
Emery Mfg. Co., Bradford, Pa.

600 Warren E
Carnegie Refining Co., Carnegie, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.

600 Oil City E
Carnegie Refg. Co., Carnegie, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.

Refineries all over the country are listed according to the products they are making today, or that they have in stock, or will make on reasonable demand.

Refineries shut down for any length of time and whose stocks of products are exhausted, are eliminated so far as possible.

It is requested, in justice to all, that all inquiries by telephone and telegraph be prepaid and this is recommended by the oil associations.

Methods of testing, approved by oil and scientific associations and the U. S. Bureau of Standards, are used. Grades of products listed, as well as names of refineries are revised each week.

Any marketers appearing in these columns are exclusive sales agents by contract with or ownership of refineries and the products listed after them are those made by those refineries.

Cold Test Stock (bright filtered)
Carnegie Refg. Co., Carnegie, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa
Warr-Penn Refining Co., Warren, Pa.

Cold Test Stock (dark filtered)
Carnegie Refg. Co., Carnegie, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.
Warr-Penn Refining Co., Warren, Pa.

Black Oil
Emery Mfg. Co., Bradford, Pa.

Motor Oils

ILLINOIS

Indian Refining Company, Lawrenceville, Ill

PENNSYLVANIA—100% PURE

Carnegie Refg. Co., Carnegie, Pa.
★Continental Refining Co., Oil City, Pa.
Emery Mfg. Co., Bradford, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa.
Seneca Oil Works, Warren, Pa.

Greases

Cup Grease
Richardson Lubricating Co., Quincy, Ill.
Schaeffer Bros. & Powell Mfg. Co., St. Louis, Mo.

Wax

ILLINOIS

124-126 White Crude Scale
★Indian Refining Company, Lawrenceville, Ill.

PENNSYLVANIA

122-124 White Crude Scale
Emery Mfg. Co., Bradford, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa

124-126 Crude Scale (off white)
Crystal Oil Works, Oil City, Pa.

Fuel Oils

38-40 Distillate (light)
Ashland Refining Co., Ashland, Ky.

NORTH LOUISIANA

14-18 Fuel Oil
Caddo Central Oil & Refining Co.,Shreveport,La

32-36 Gas Oil
Caddo Central Oil & Refining Co.,Shreveport,La

OKLAHOMA

26-30 Fuel Oil
★Bolene Refining Co., Enid, Okla.

30-32 Fuel Oil
★Bolene Refining Co., Enid, Okla.

32-36 Gas Oil
★Bolene Refining Co., Enid, Okla.
Cameron Refg. Co., Ardmore, Okla.

24-26 Zero Fuel Oil
Altitude Petroleum Co., Tulsa, Okla.

34-38 Straw Distillate
Cameron Refg. Co., Ardmore, Okla.

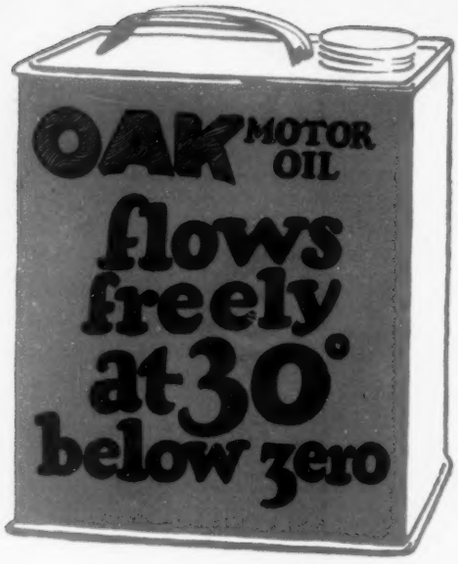
38-40 Straw Distillate
★Bolene Refining Co., Enid, Okla.

PENNSYLVANIA

36-40 Fuel Oil
Carnegie Refg. Co., Carnegie, Pa.
Emery Mfg. Co., Bradford, Pa.
Pennsylvania Oil Products Refg. Co., Warren, Pa

Petroleum Coke

Shreveport Prod. & Refg. Co., Shreveport, La.



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Field Methods

are described in detail by Messrs. Cox, Dake and Muilenburg in their book entitled FIELD METHODS IN PETROLEUM GEOLOGY.

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Milwaukee Tank Works Offers Preferred

CLEVELAND, Jan. 16.—Milwaukee Tank Works, Inc., Milwaukee, manufacturer of service station equipment, particularly tank and pumps, is offering $300,000 of 7 per cent cumulative redemption fund preferred stock at par, $100 a share, through Aultman-Smith Inc., of Milwaukee. The company previous to this issue had outstanding only $100,000 of common stock.

The business of the Milwaukee Tank Works was started in 1912 with only $5,000 capital, according to a statement of Edgar A. Bienenstok, president of the corporation. The first year's sales were only $21,000 but increased steadily until in 1925 sales exceeded $1,400,000. Net earnings in the last seven years have averaged 23.4 per cent on the combined capital and surplus.

Balance sheet of Sept. 1, 1925, shows gross assets of $990,402. Current assets were $632,621 and current liabilities $145,010. Surplus was $365,391. Goodwill and patents were carried at $1 each.

Hearing on Leaky Car Stenciling Delayed

WASHINGTON, Jan. 18.—The hearing on the proper stenciling of leaky tank cars proposed by the Bureau of Explosives of the American Railway Association, which was to have been held by W. P. Bartel, the chief of the Bureau of Service of the Interstate Commerce Commission on Jan. 6, was not held because Col. B. W. Dunn, head of the Bureau of Explosives, withdrew his proposals. He was not prepared to meet the objections that had been raised, hence the withdrawal, for the time being. They will be presented later according to the present understanding.

Oklahoma Oil Jobbers To Meet Jan. 21

TULSA, Jan. 15.—The annual meeting of the Oklahoma Oil Jobbers Association will be held at Oklahoma City on Jan. 21. At this meeting officers for the new year will be selected and association policies for 1926 determined.

L. A. Warren, Enid, is president and C. M. Kinney is secretary. Mr. Warren has indicated that he will not accept re-election. He has served the organization two years.

WESTON, W. VA.—The Sterling Supply Co., composed of business men of Burnsville. W. Va., will open a bulk and filling station east of Weston. The company will handle products of the Ohio Valley Refining Co., St. Marys, W. Va.

Method of Handling Dubbs Residuum Saves $500 a Day On Form Units

By J. C. Chatfield
N. P. N. Staff Writer

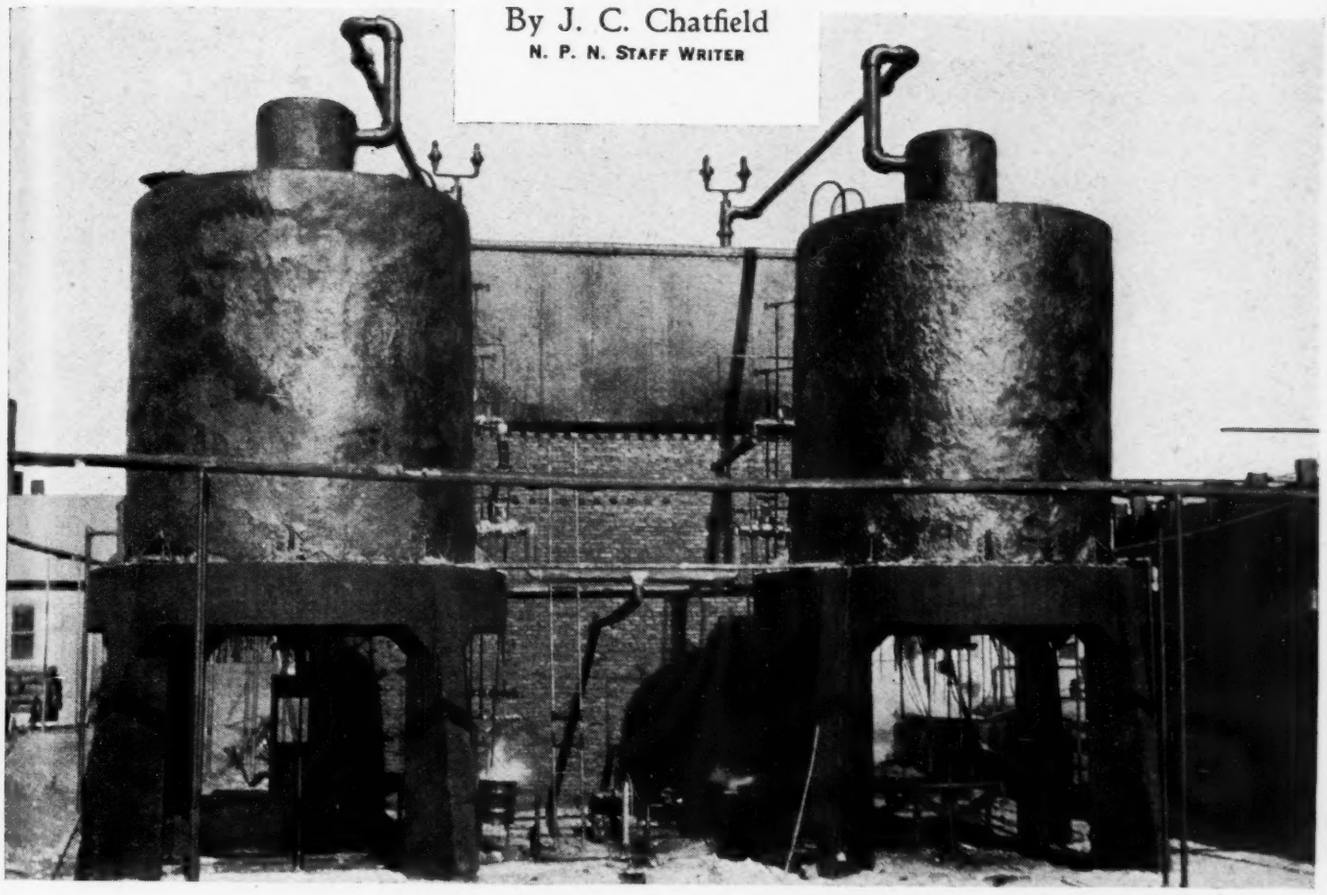

Fig. 1. Evaporators at Pure Oil Co. Ardmore refinery.

ARDMORE, Jan. 18

An efficient means of handling and burning residuum from Dubbs cracking stills without waste has been put in service by the Pure Oil Co. at its refinery here. The refinery now burns all of the Dubbs residuum under its stills and in the boiler house.

The new method was installed at a cost of around $10,000 and has been creating a direct saving of $500 per day in fuel costs as well as a saving in the expense of cleaning out tanks which had accumulated heavy deposits of solidified residuum resembling bituminous coal.

Formerly residuum was run from the four Dubbs units into two tanks of 2500 barrels capacity. Under this method there was an accumulation of around 8 feet of hard carbon in the tanks every 45 to 60 days. To clean the tanks it was necessary to cut rivets and take out a tank sheet in order for workmen to get in and pick out the hard precipitation. Ordinarily it required the services of five teams and six men for seven days at a cost of around $65 per day to clean a tank. The hard material was not usable and had to be hauled away from the plant and dumped.

With the new method of handling one man has been able to clean out three cubic yards of soft granular carbon from the system in an hour and a half. Cleaning has been found necessary about once every 10 days. Operating personnel has been increased by only three men as a result of installing the system.

The system consists of withdrawing continuously from the Dubbs stills residuum which is taken through a 3-inch line direct to an evaporator where it is kept agitated by the injection of steam through a bottom spider coil. Some fractions of the residuum are vaporized in the evaporator due to the release of pressure, turbulence and injection of steam. These are withdrawn through an overhead line and condensed for recycling through the pressure stills.

Fuel for the plant is withdrawn direct from the evaporator by a specially constructed pump which circulates the material through a belt line to all furnaces in the plant. Unused residuum is dumped back in the evaporator to be reheated by the steam and incoming residuum.

To keep the maximum velocity of fuel in the belt line and avoid clogging of valves, the line is laid first to the furnaces using the greatest amount of fuel and then on to furnaces using a lesser amount. From the evaporator the fuel is pumped to the Dubbs plant, thence, to the boiler plant and last to the battery of crude stills.

Some Residuum Recracked

Pure's Ardmore refinery runs on 28-29 gravity Healdton crude. Under its method of pressure still operation about 21 per cent of the unit charge is withdrawn as residuum. This residuum has a gravity of 11 to 13 and was formerly all run to fuel oil storage.

With the present method about 25 to 30 per cent of the residuum or around 5 per cent of the total pressure still charge is taken off the evaporators overhead and returned to the Dubbs units for recracking. This overhead stock has an initial boiling point of about 155-156 degrees F. and an end point of around 614-615 F. It lends itself readily to further cracking.

The residuum portion which is now used as fuel for the plant has a gravity

of about 7 to 10.5 degrees Be. It is heavily loaded with asphalt and granular carbon and hence rich in B. t. u. values.

To contruct the evaporations an old 12 by 30 foot shell still was cut in half with a torch and a bottom sheet with manhole for cleaning out welded on. The old still thus made two evaporators, one of which is kept as a stand-by in case the residuum should be allowed to get too cold at some time, and for use during cleaning out.

Description of Evaporators

Fig. 1 is a photograph of the two evaporators installed on a concrete foundation at the Pure plant. Overhead lines to the condenser boxes are shown at the top of the photograph. Pump out lines are shown connecting with the evaporators near the bottom. One draw-off line is of 1½ inch material which is generally used. Just above it is a 2-inch stand-by line which can be used in case the residuum should become too cool for the smaller line to handle.

The fuel inlet line does not show in this photograph but may be seen in Fig. 2, a rear view. This line enters the evaporator 2½ feet from the top.

The domes at the top of the evaporators are baffled to throw back any entrained heavy ends which might tend to go over into the condenser coils with the residuum vapors released in the evaporators.

In the bottom of the evaporator is a perforated 3-inch spider steam coil through which steam is introduced. No steam meter has been installed as yet to measure the quantity consumed. In practice a 2-inch valve is opened 2½ spokes and it is figured that steam consumption corresponds roughly to that of an ordinary still.

Saturated steam has been used thus far, which has kept the residuum in the evaporators at a temperature of around 400 to 460 degrees F. The residuum leaves the Dubbs stills at about 625 degrees but naturally loses some of this heat before reaching the evaporator in spite of the fact that the line is insulated.

Arrangements are being made to pass the steam through a coil in the cracking still furnace to superheat it before introducing it into the evaporator. When that is done it is the hope of operators that the temperature may be raised to around 500 degrees F.

Pumps Altered Slightly

As mentioned above after a 10-day run one evaporator is shut down for cleaning out and the other placed in service. After allowing it to stand three days for cooling it was found that the residuum was soft and grainy so that it could be scooped out readily. It is the theory of operators that if the evaporator temperature is kept at 500 degrees that a large part of the residuum now precipitated will be circulated through the belt line and burned as fuel.

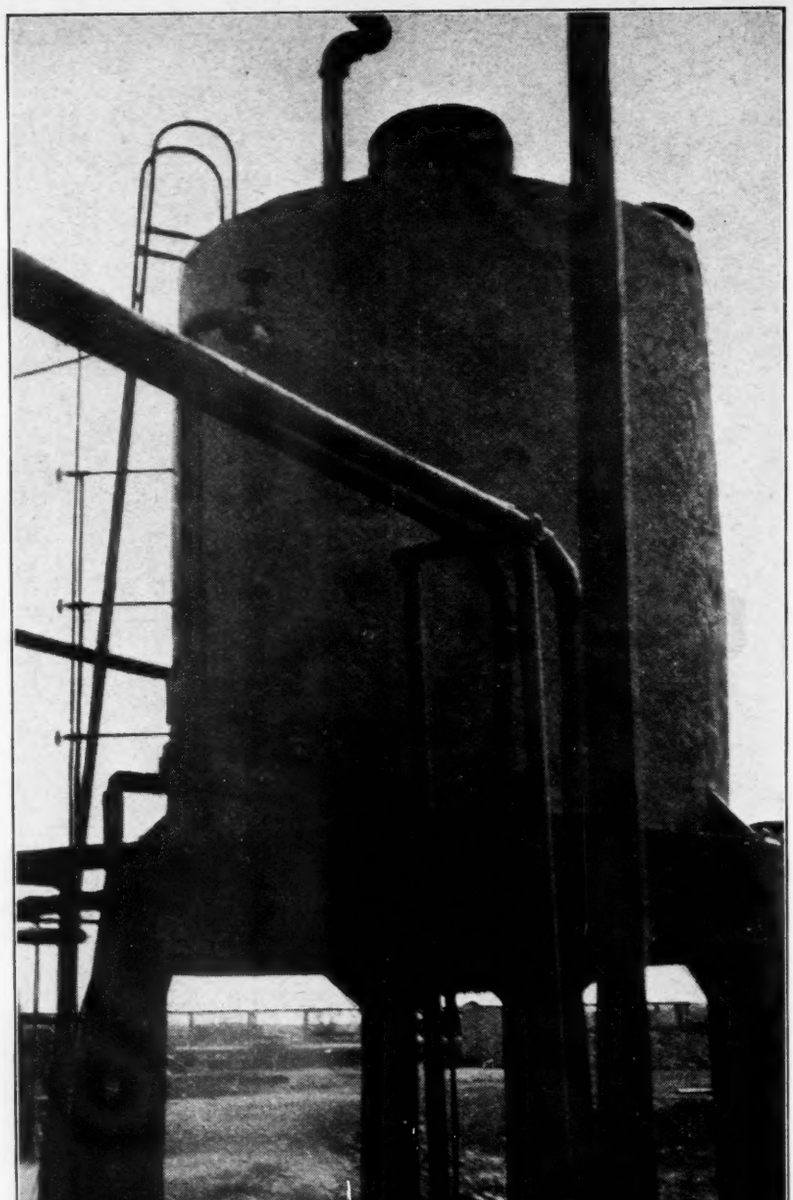

Fig. 2. Rear view of evaporator.

Two Snow pumps, 10 by 4 by 10 have been installed under the condenser boxes to handle the fuel through the belt line. In these pumps the suction was reduced from 4 to 3 inches and brass liners were replaced with cast iron. The packing was replaced with steel rings and the pumps were provided with water cooled stuffing boxes.

The pumps are now very similar to cylinders of an automobile engine. There has been no leakage observed and the liners have become brightly polished in service.

A pressure of about 100 pounds per square inch is maintained in the fuel belt line by the pumps. The line is bent for turns throughout its length to maintain velocity of the residuum and to eliminate the possible of clogging. Reducing valves are provided at the furnaces and the residuum is sprayed into the fire boxes with steam.

Saginaw Well Pumping

SAGINAW, MICH., Jan. 18.—The No. 3 well of the Saginaw Prospecting Co. has been put on the pump. It made 30 barrels the first day. This well was delayed in completion by collapsed casing following the shot. It found the top of the pay sand seven feet lower than the No. 2, to which it is a diagonal offset. Nos. 1 and 2 were both producers and are making about 25 barrels each, several weeks after completion.

I. C. C. Uses Group Plan to Hear Oil Freight Rate Cases

Staff Special

WASHINGTON, Jan. 19

THE oil industry seemingly has annexed the Interstate Commerce commission and made it a part of its machinery for the conduct of its business. No fewer than 25 formal complaints by oil companies or its customers passed one stage or another in the process of obtaining reparation on account of unreasonable rates, either on the product of the industry or on materials and supplies used by it. The 25 cases involved the rates paid by the industry for supplies. Each was not separately heard. On the contrary so many cases are brought by the same company or about one set of rates that the regulating body lumps them and treats a group as one case.

Broadly speaking the 25 cases this week were complaints by oil concerns against the rates on pipe and oil well supplies that had to be moved about in the territory west of the Mississippi because of the discoveries, particularly in El Dorado-Smackover fields. Pipe and other supplies, including tank material, were rushed to those pools when they came in strong, regardless of the rates. Now the shippers and receivers are about to collect some of the money they then paid.

Three reports were made on rates pertaining to supplies. In each the examiner who heard the testimony, said the commission should hold the rates charged were unreasonable and order the return of part of the rate charged. The awards, if made in accordance with the recommendations of the examiners will run into the hundreds of thousands of dollars. The first case, S. B. Bender Iron & Supply Co. vs. K. C. S., raised the question whether the fifth class rates, imposed on shipments of pipe from points in Louisiana, other than Shreveport and Thornton, and Texas, and oil well supplies moving from the same points, to Arkansas and Oklahoma. Examiner Trezise held the rates were unreasonable because they were in excess of the rates established in the Memphis-Southwestern case. Trezise said the commission should so hold. The complainants in that case, each complaint constituting a case, were:

Sub-No. 1, S. B. Bender Iron & Supply Co. vs. St. Louis-Southwestern Railway Co. et al.; Sub-No. 2, Smitherman & McDonald, Inc., vs. the Louisiana & North West Railroad Co.; Sub-No. 3, Smitherman & McDonald vs. the Louisiana & North West Railroad Co. et al.; Sub-No. 4, Woodley Petroleum Co. vs. the Louisiana & North West Railroad Co. et al.; Sub-No. 5, Woodley Petroleum Co. vs. Louisiana Railway & Navigation Co. et al.; Sub-No. 6, Woodley Petroleum Co. vs. the Texas & Pacific Railway Co. et al.; Sub-No. 7, Same vs. Texas & Pacific Railway Co. et al. No. 16822, Smitherman & McDonald, Inc., vs. the Louisiana & North West Railroad Co. et al.; Sub.-No. 1, Same vs. Same; Sub-No. 2, V. K. F. Drilling Co. vs. Louisiana & Arkansas Railway Co. et al.; Sub-No. 3, Woodley Petroleum Co. vs. Louisiana Railway & Navigation Co. et al.; Sub-No. 4, Same vs Missouri Pacific Railroad Co. et al.; Sub-No. 5, Louisiana Oil Refining Corp. et al vs. the Louisiana & North West Railroad Co. et al.

Examiner Alfred S. Knowlton in a complaint by the Sinclair Crude Oil Purchasing Co. against the Atchison, Topeka & Santa Fe said the commission should condemn the rate on tank material, applied on shipments of tank materials from points in Pennsylvania, Ohio, Indiana and Illinois to points in Oklahoma and Texas, in 1922 and 1923. But he said it should not order refund because the railroads could not have known that there would be a large volume of business of that sort and that therefore it would be entitled to commodity rates lower than the class rates applied. The cases joined with the chief complaint hereinbefore mentioned are: No. 15555, Sinclair Crude Oil Purchasing Co. et al. vs. Chicago & Erie, et al.; No. 15521, Sinclair Crude Oil Purchasing Co. vs. Atchison, Topeka & Santa Fe, et al.; Sub. No. 1, same vs. same; and Sub. No. 3, Same vs. Same; and No. 16127, Sinclair Crude Oil Purchasing Co. vs. Chicago & Alton, et al.

The third case, also handled by Examiner Trezise was brought by the Standard Oil Co. of Louisiana against the Texas & Pacific, involving rates on iron and steel pipe from points in Louisiana to El Dorado-Smackover in 1922 and 1923. He said there should be reparation to the basis of rates established in the Memphis-Southwestern case.

More Dubbs Units Ordered

CHICAGO, Jan. 19.—Trinidad Leaseholds Ltd., with main offices in London, England, has entered into a contract with the Universal Oil Products Co., Chicago for the immediate construction of two Dubbs cracking units at Point-a-Pierre, Trinidad, British West Indies, according to J. G. Alther, secretary of the Universal Oil Products Co.

Mr. Alther also states that the Roxana Petroleum Corp. has ordered for immediate installation four more Dubbs units for its Wood River, Ill., plant and two more Dubbs units for its Arkansas City, Kan., plant. This will make the Roxana a total of 16 Dubbs units at Wood River and eight at Arkansas City.

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Big Lake Leading Texas Fields In Per Well Per Day Averages

By Paul Wagner
N. P. N. Staff Writer

HOUSTON, Jan. 18

BIG Lake production, in terms of per well per day yields, easily leads all other Texas fields at the beginning of 1926. Its 74 producing wells started the new year averaging 463.5 barrels daily as compared with 12 wells averaging 743.0 barrels, January 1, 1925. With the exception of fields having only discovery wells to their credit no other Texas district shows per well daily production averages exceeding 100 barrels.

Two reasons account for the relatively high per well per day averages of the Big Lake field. One of these reasons is the fact that the field is operated in its entirety by two interests, the Big Lake Oil Co., and the Texon-Group 1 combination, which last mentioned discovered the pool in 1923. The other reason reflects the character of the oolitic lime formation which yields the oil in the Big Lake field. Its staying qualites contrast with the rapid declines of the black lime producing horizon of the general Ranger territory.

The general Ranger territory, which is here considered to include the gray lime area of Stephens county as well as the black lime development of Stephen and Comanche counties, had its height of development from 1918 to 1920. Wells now producing in that general territory are giving up their yields on a basis of settled production.

Stephens county's 1267 producing wells began the year averaging 10.9 barrels per well per day; the Eastland-Comanche county area, including the Ranger pool proper, was averaging 7.2 barrels per well from a total of 1252 wells. Palo Pinto county's 156 wells, which included those producing from the lime horizon and from shallower sand levels, averaged 2.5 barrels.

Wells producing from shallow sand levels in the Brown-Coleman-Callahan county division of this general district totalled 1454, averaging 5.7 barrels. Shackelford county had 711 wells averaging 3.6 barrels. A single well in Jack county was good for about 20 barrels.

West Texas General Area

Mitchell county, which includes the older Westbrook pool and the newer Iatan development, began the year with 68 wells averaging 42.2 barrels daily. This compared with 39 wells averaging 47.9 barrels daily, January 1, 1925.

Scurry county's four wells, in a territory bearing general relation to the Mitchell county development, were averaging 14.7 barrels as compared with two wells a year ago making 22.5 barrels each. Crockett county's two wells, in a territory regarded as a prospect area rather than a present actual development, were averaging 20 barrels per well per day. The discovery well of the southwestern Upton county pool was making about 200 barrels of fluid, 20 per cent brine, pending better water shut-off.

Panhandle-Amarillo District

The Panhandle territory, otherwise known as the Amarillo district, had 61 producing wells to its credit as compared with 16 at the beginning of 1925. In the 12 months period, the per well per day average had declined from 86.5 barrels to 77.8 barrels. Recent completions good for 800 or more barrels, initial production, had their effect in holding up Panhandle averages.

Throckmorton county and Young county are herein discussed in relation to the Greater Wichita Falls district because of the bulk of their production coming from Strawn series sands. Young county's 568 wells averaged 17.4 barrels per well per day and Throckmorton county's five wells 52.0 barrels. Baylor county's 16 wells averaged 19.1 barrels.

Wichita Falls District

The rest of the Greater Wichita Falls district produces mainly from the so-called Cisco sands of lensed characteristics, which are found at varying depths. Wichita county, which is made to include the whole of the old Electra and Burkburnett development areas, averaged 5.1 barrels daily from 6957 wells as compared with 6.1 barrels from 6353 wells, January 1, 1925.

Wilbarger county was averaging 6.6 barrels from 238 wells as compared with 19.8 barrels from 27 wells, January 1, 1925. Archer county's 2189 wells averaged 15.5 barrels as compared with 1531 wells averaging 27.1 barrels a year previously. Clay county's 256 wells averaged 1.5 barrels as compared with 281 wells producing 1.2 barrels average at the beginning of 1925.

Montague county, which began 1925 with a single well good for 15 barrels daily, had reached to 21 producing wells averaging 35.7 barrels at the beginning of 1926.

In the Woodbine fault zone of Central East Texas only the Wortham pool is interesting for comparative purposes. Its 308 producing wells at the beginning of 1926 were averaging 48.7 barrels as compared with 21 wells making 4057.6 barrels per well per day, January 1, 1925.

The figures on Wortham are especially interesting because of the field's flush period centering in the three months from January to March of last year. Wortham then declined more rapidly than other fields of the fault zone to the end that now the per well per day average is only slightly greater than similar yields from the Powell field.

Powell's 818 producing wells, averaging 44.7 barrels at the beginning of 1926, contrast with 479 wells averaging roundly 125 barrels daily a year previously.

Wortham had produced 16,416,459 barrels total yield to December 1, 1925; Powell's total cumulative had been 77,140,041 barrels; Mexia's cumulative had been 74,464,645 barrels; Currie's cumulative, 5,179,534 barrels; and Richland's cumulative, 5,142,977 barrels.

For purposes of comparison, the cumulative production of these fields on January 1, 1925, had been as follows: Wortham, 888,856 barrels; Powell, 61,058,738 barrels; Mexia, 68,231,691 barrels; Currie, 4,737,691 barrels; Richland, 3,414,714 barrels.

On January 1, 1925, Mexia was averaging 34.6 barrels per well per day from 444 producing wells; Currie 25 barrels from 54 wells and Richland 21.4 barrels from 98 wells.

Lytton Springs Development

Lytton Springs, in northern Caldwell county, where migratory oil had accumulated in beds of decomposed lava, known as serpentine, had its rise to importance in the petroleum industry in 1925. This field is the second known place in the United States where serpentine has served as a reservoir for oil, the first having been the old Thrall field, in Williamson county, which was discovered in 1914.

On December 1, 1925, the Lytton Springs field had 310 producing wells averaging nearly 31 barrels per well per day. Peak production of the field was reached on August 14, 1924, in which month total completions reached 224 wells. August 14 production was 15,293 barrels as compared with December 1 production of 9608 barrels.

Per acre yields at Lytton Springs as of November 1, 1925, averaged approxi-

mately 1600 barrels from roundly 1125 acres of proved ground. The pool had been defined except for a small area in the southeastern part. As the wells in the north end of the field declined newer completions to the south tended to maintain production fairly constant around the 9000 barrels daily field total well toward the end of the year.

Luling, with its total field production of nearly 21,000 barrels daily, at the beginning of 1926, had months previously passed through its stage of flush declines and wells were dropping off only nominally. This field, in Caldwell and Quadalupe counties, produces from a fault zone in the Edwards limestone.

Gulf Coastal Fields

Gulf Coastal salt dome fields produced roundly 36,000,000 barrels of crude in 1925 as compared with approximately 29,725,000 barrels in 1924. A number of new domes have been recently discovered, which will serve to maintain yearly production totals in 1926 and possibly increase them. The status of these domes was discussed on page 54 of the December 23, 1925 issue of this periodical, since which time two others have assumed prominence.

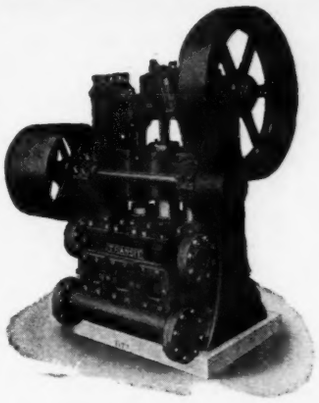
The latest dome proved for production is the Nash prospect of the Rycade Oil Corp., in Fort Bend county, about seven miles from Damon Mound, where a first well is good for 350 barrels daily, and upward, from total depth of 4146 feet. The discovery well is the fifth test drilled on the Rycade's prospect. Crude is of the heavy lubricant grade prized in Gulf Coastal Texas and is reported to test 17.5 gravity at 75 degrees Fahrenheit.

Piedras Pintas Crude Light

Humble Oil & Refining Co's. recently reported offside discovery on the Piedras Pintas salt dome, in Duval county, is the other discovery calling for greatest attention. Oil from this well tests about 43 gravity and contains nearly 90 per cent of gasoline and kerosene fractions in refinery distillation.

The character of the Piedras Pintas oil is something new in the salt dome country and conclusions regarding its significance are being reserved. This salt dome is about 150 miles southwest of saline structures in the Houston district which either yield heavy lubricant crude with no gasoline content or which give up Coastal light crude of the character first topped for gas oil before being utilized for other purposes. Gas oil from the last mentioned Gulf Coastal crude yields gasoline only under cracking practice.

BROOKVILLE, IND.—"Wes" Cooksey Oil Co. has signed a new contract with the Roxana Petroleum Corp., St. Louis, Ill., and has bought additional equipment. Several new pumps have been installed and the company is looking forward to a record-breaking year. The company's tank trucks cover a radius of 30 miles around Brookville.



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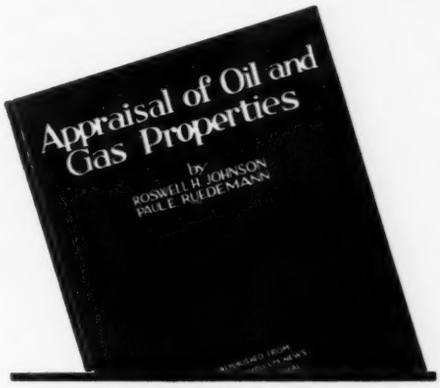

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Some Rules For Painting Oil Tanks, Quantities Needed To Cover

By H. L. Minister

Petroleum Engineer, Denver, Col.

DENVER, COL.

STEEL being usually more perishable than wood, as well as more expensive, and used for service where its strength is essential to the stability of the structure, its protection from corrosion by painting is of prime importance.

It must first of all be recognized that the cleaning of the surface before painting is absolutely necessary. Thus all mud, dirt and rust spots are to be removed. The dirt and mud are usually easily removed by the use of water; while the rust spots are either removed with wire brushes or steel scrapers, in order to assure a clean, adherant surface.

Wherever possible it is advisable to make use of the sand-blast in cleaning steel, as it is easier, cheaper and far more efficient. Pickling is sometimes made use of, and when used, a 10 per cent sulfuric acid solution is used; the solution is made more active by heating. All traces of acid must then be removed by washing, and the metal immediately dried and painted. However, pickling is seldom used, as it is expensive and not satisfactory unless extreme care is used in removing all traces of the acid; further it leaves the metal wet and permits rusting to begin before the paint can be applied.

The paint for metal tanks should be tough and elastic, and to as great a degree as possible it should be water-proof. After making a careful study of tank painting it appears that for ordinary conditions the quality of materials and workmanship is of far more importance, than the particular pigment used.

Less than two coats should never be applied and three are better. The first coat is called the priming coat. The second coat is known as the finishing coat where two coats only are applied. Engineers are very much divided as to what makes the best priming coat. Linseed oil makes a transparent coating that allows imperfections in the workmanship and rusted spots to be easily seen; yet it has marked disadvantage, in that paint does not adhere as well to linseed oil that has weathered, as to a good paint, and to get favorable results, the oil must be applied hot.

Red Lead Favorite Priming Coat

Red lead paint toned down with lampblack, or finely ground graphite in linseed oil are favorite priming coats, the latter being used largely in oil tank painting as it flows well, is easily applied, less expensive, and if properly made gives excellent results. Various paint manufacturers, and steel companies differ on the kind of paint to be used—some use the above mentioned, while others recommend asphaltum paints, graphite mixed with lampblack, etc., it has been found that liquid carbon paint is an excellent one for all tank work. At least one week should elapse between coats, and the paint should never be applied in freezing weather.

Referring to the sketch, two coats of liquid carbon paint are applied to the tank, both outside and top, then a third or finishing coat of liquid carbon paint is applied above the six foot mark (1-72 inch ring plate on tank). After this has completely dried, a coat of gray paint is applied to the bottom six feet of the tank. It being understood that the underside of the bottom of the tank is to be given one coat of graphite or equally good paint, before being lowered into position on the foundation, or grade. This bottom coat of paint is not considered in the accompanying tables, as same is to be applied by the tank erectors or contractors.

It is advisable to award a separate contract for painting the tanks, including the priming coat, which is often put on by the tank contractors. But it is expressly understood, that a reasonable sum shall be reserved by the purchaser out of the contract price to cover the cost of the painting. Contracts for painting are usually awarded covering the cleaning and painting at so much per square foot, depending upon the number of coats, as

1. Cleaning A — cents per square foot.
2. Priming coat B — cents per square foot.
3. Second coat C — cents per square foot.
4. Third coat D — cents per square foot.

The cleaning generally runs from 2¾ to 3¼ cents per square foot, while the three coats of paint, decrease from B-cents to D-cents per square foot, covering either just the labor or labor and paint combined. In the accompanying tables it is figured that

a. 1 gallon liquid carbon paint covers 450 sq. ft.—2 coats.
b. 1 gallon liquid carbon paint covers 400 sq. ft.—3 coats.
c. 1 gallon of gray paint covers 500 sq. ft.—3rd coat.

Five per cent should be added to column "X," to cover painting of winch, stairway, etc.

In conclusion the following rules should govern the painting of tanks:—

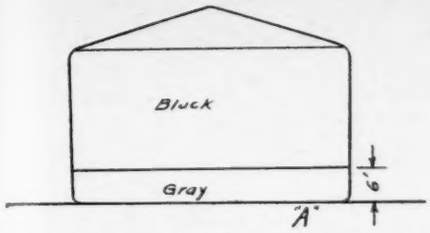
1. Be sure tanks have been tested for leaks and if such occur, have same calked, and repaired.

2. Properly prepare the surface of the metal, by removing all dirt, grease, millscale and rust.

3. Apply the priming coat, making sure that all rivet heads, seams, etc., are

Circumference-Inside Bottom Ring	Diameter	Height	Cap. (42-gal.) Bbls.	Type of Roof	Sq. Ft. Painting Sur. Black	Sq. Ft. Painting Sur. Gray	Amt. Paint (Gals.) Black	Amt. Paint (Gals.) Gray
31′-5″	10′-0″	9′-3″	130	Dome 12″ High 12′ rad.	370	189	0.88	0.35
31′-5″	10′-0″	10′-0″	140	Dome 12″ High 12′ rad.	394	189	0.94	0.35
31′-5″	10′-0″	10′-8″	150	Dome 12″ High 12′ rad.	415	189	0.99	0.35
31′-5″	10′-0″	14′-4″	200	Dome 12″ High 12′ rad.	450	189	1.08	0.35
37′-8¾″	12′-0″	12′-5″	250	Dome 15″ High 15′ rad.	584	227	1.41	0.41
37′-8¾″	12′-0″	15′-0″	300	Dome 15″ High 15′ rad.	681	227	1.65	0.41
50′-3 1/16″	16′-0″	10′-0″	350	Dome 20″ High 20′ rad.	706	302	1.69	0.55
50′-3 1/16″	16′-0″	11′-6″	400	Dome 20″ High 20′ rad.	781	302	1.88	0.55
50′-3 1/16″	16′-0″	12′-9″	450	Dome 20″ High 20′ rad.	844	302	2.04	0.55
62′-10″	20′-0″	10′-0″	500	Dome 24″ High 25′ rad.	949	378	2.27	0.69
62′-10″	20′-0″	11′-0″	600	Dome 24″ High 25′ rad.	1,012	378	2.44	0.69
62′-10″	20′-0″	14′-6″	800	Dome 24″ High 25′ rad.	1,232	378	2.98	0.69
62′-10″	20′-0″	18′-0″	1,000	Dome 24″ High 25′ rad.	1,451	378	3.53	0.69
62′-10″	20′-0″	22′-6″	1,250	Dome 24″ High 25′ rad.	1,734	378	3.73	0.69
94′-3″	30′-0″	10′-0″	1,250	Dome 4′ High 30′ rad.	1,675	566	4.04	1.03
94′-3″	30′-0″	12′-0″	1,500	Dome 4′ High 30′ rad.	1,863	566	4.51	1.03
94′-3″	30′-0″	14′-6″	1,800	Dome 4′ High 30′ rad.	2,098	566	5.09	1.03
94′-3″	30′-0″	16′-0″	2,000	Dome 4′ High 30′ rad.	2,240	566	5.45	1.03
94′-3″	30′-0″	18′-0″	2,250	Dome 4′ High 30′ rad.	2,429	566	5.92	1.03
94′-3″	30′-0″	20′-0″	2,500	Dome 4′ High 30′ rad.	2,617	566	6.39	1.03
94′-3″	30′-0″	24′-0″	3,000	Dome 4′ High 30′ rad.	2,994	566	7.33	1.03
94′-3″	30′-0″	28′-0″	3,500	Dome 4′ High 30′ rad.	3,371	566	8.28	1.03
109′-1½″	35′-0″	23′-3″	4,000	Dome and 4″ pipe posts-5′ high 34′ rad.	3,567	660	8.74	1.20
109′-1½″	35′-0″	26′-3″	4,500	Dome and 4″ pipe posts-5′ high 34′ rad.	3,896	660	9.56	1.20
109′-1½″	35′-0″	30′-0″	5,000	Dome and 4″ pipe posts-5′ high 34′ rad.	4,307	660	10.59	1.20
125′-8″	40′-0″	24′-9″	5,500	Dome and 6″ pipe posts-6′ high 36′ rad.	4,430	755	10.87	1.38
138′-2¾″	44′-0″	28′-0″	7,500	Dome and 6″ pipe posts-6′ high 40′ rad.	5,460	830	13.45	1.51
157′-1″	50′-0″	28′-6″	10,000	Dome and 8′ pipe posts-7′ high 48′ rad.	6,520	944	16.04	1.72
169′-7¾″	54′-0″	30′-0″	12,000	Framed-Cone Roof Slope 1½ in 12	7,397	1020	18.22	1.86
207′-4½″	66′-0″	25′-0″	15,000	Framed-Cone Roof Slope 1½ in 12	8,636	1245	22.76	2.26
238′-9⅜″	76′-0″	25′-0″	20,000	Framed-Cone Roof Slope 1½ in 12	10,541	1434	25.96	2.61
245′-0½″	78′-0″	30′-0″	25,000	Framed-Cone Roof Slope 1½ in 12	12,167	1472	30.02	2.68
270′-2¾″	86′-0″	30′-0″	30,000	Framed-Cone Roof Slope 1½ in 12	13,955	1623	34.44	2.96
280′-0¾″	92′-0″	30′-4″	35,000	Framed-Cone Roof Slope 1½ in 12	15,473	1736	38.21	3.16
326′-8¾″	104′-0″	30′-4″	45,000	Framed-Cone Roof Slope 1½ in 12	18,471	1962	45.64	3.57
367′-6⅞″	117′-0″	29′-0″	55,000	Framed-Cone Roof Slope 1½ in 12	21,503	2207	53.15	4.01
368′-2¾″	117′-2¾″	41′-10″	80,000*	Framed-Cone	26,284	2212	65.10	4.02
368′-2¾″	117′-2¾″	41′-10″	80,000†	Framed-Cone	26,284	2212	65.10	4.02

NOTES:—*Chicago Bridge.
†S. O. Type.



Color plan for tank painting. (See page 102).

well covered, as much depends upon this coat.

4. After first coat has sufficiently dried, apply second, likewise the third coat, and so on.

5. Painting shall be done only when the surface of the metal is perfectly dry.

6. Tanks must not be painted in stormy or cold weather, unless special precautions are taken.

7. All paints used, shall be of good quality.

8. Workmanship to be first-class in every respect.

Penn. Grade Elects Officers for 1926

PITTSBURGH, Jan. 18.—The board of directors of the Pennsylvania Crude Oil Association on Thursday, at the annual meeting, elected Clayton G. Dorn, of Bradford, as president. Mr. Dorn is the treasurer and one of the principal stockholders of the Forest Oil Corp. He succeeds as president of the association E. C. Breene of Oil City.

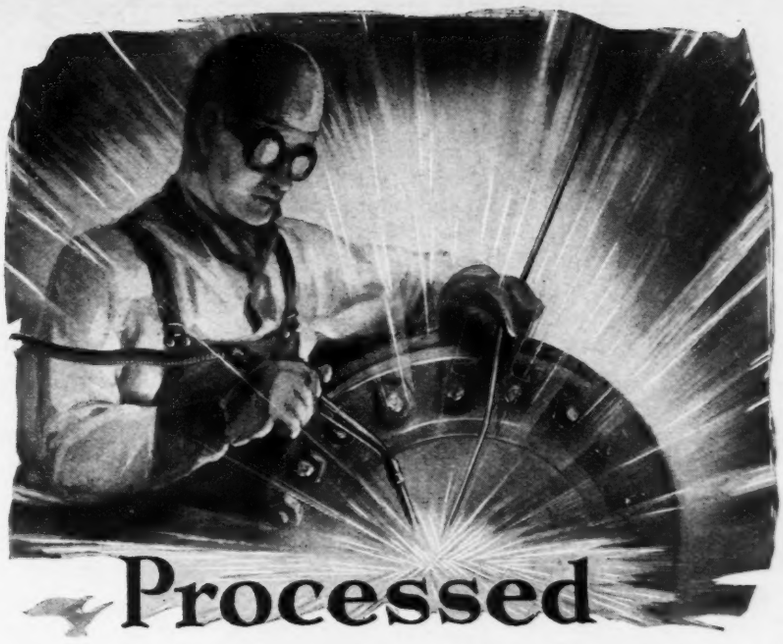
Other officers elected were J. P. Flynn of Sistersville, vice president; E. M. Lyons, Clarendon, Pa., recording secretary, and Samuel Messer, Oil City, treasurer. These were all re-elections.

R. J. Alexander, who has been executive secretary of the association practically since its inception, will continue in that capacity.

One change has been made in the directorate. I. H. Shearer, of the Kendall Refining Co., Bradford, succeeds P. C. Hubbard, of the same company. Mr. Hubbard recently resigned from the Kendall.

David B. McCalmont, of Franklin; C. L. Suhr and Samuel Messer, of Oil City, constitute the finance committee for 1926. They served in the same capacity in 1925. The advertising firm of Young & Rubicam, of Philadelphia, will continue to handle the advertising campaign for the association.

GREENUP, ILL.—Blue Bell Oil Co. recently completed its bulk plant at Charleston, Ill. The company recently leased the Five Points Service Station. H. L. Starks, formerly with the Charleston Oil & Gasoline Co., is manager of the Blue Bell. The company is handling Pure Oil Co.'s products, according to Arthur Jobe, president of the Blue Bell company.



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Here & There

National Petroleum News

Byron D. Benson, who resigned recently from the Tide Water Oil Co., New York, is now with Frederick Southack & Alwyn Ball, Jr., Inc., New York City, an old and well known real estate company. The company recently has gone into the distribution of securities with special attention to real estate bonds, in addition to its activities as specialists in the brokerage, management, insurance and mortgage loan fields. Mr. Benson will be assistant to the president and will devote all of his time to increasing the business of the various departments.

Mr. Benson had been with the Tide Water since he left Princeton in 1912 and during the past five or six years has served as secretary and general manager, as well as vice president.

* * *

R. S. King, president of The Refiners Oil Co., Dayton, O., will leave in the near future for an extended trip through South America. He will be gone about three months, according to William C. Conser, manager of the gasoline department.

* * *

A. C. Rogers, salesman in Portland, Me. territory for the Standard Oil Co. of New York, New York, with state headquarters at Portland, was recently appointed agent for the company's branch at Brunswick, Me. This territory comprises parts of several counties.

* * *

E. H. Hillman, formerly lubricating engineer for the Minot, N. D. division of the Standard Oil Co. of Indiana, has been promoted to the technical department at the general offices in Chicago.

* * *

Eugene A. Stephenson, who is a member of the staff of Ralph E. Davis, consulting geologist, oil production and appraisal engineer, Pittsburgh, Pa., is in New Mexico where he is investigating various areas for clients.

* * *

Ray Thomas, owner of the Lafayette oil Co., Lafayette, La. was on the streets of Shreveport on Dec. 26, shaking hands with old friends and inviting them down to the country "where coffee is coffee".

* * *

George Walterhauser, assistant superintendent of the Cushing, Okla. refinery of the Shaffer Oil Refining Co., spent the recent holidays at Chicago.

* * *

Carl Harrell, secretary and treasurer of The Tresler Oil Co., Cincinnati, O., is confined to his home by illness.

* * *

F. E. Martin, president of F. E. Martin & Co., Lake Bluff, Ill., has started on a trip through the Northwest to call on oil jobbers.

Charles G. Malott, secretary and treasurer of the Dixie Service Station, Inc., Bedford, Ind., sailed from New York on Jan. 20 on the Cunard liner "Laconia" for a world cruise via Cuba and Panama Canal.

The itinerary includes about 40 countries. Mr. Malott will leave the cruise in France in June and expects to make an extended trip to England, Scotland and Wales. On this part, he will particularly observe the service rendered motorists, especially in Egypt where he will make a note as to whether automobile radiators are served with water or camel's milk.

The Dixie Service Station claims to be the first in Indiana to display the Red Hat insignia of the Independent Oil Men of America.

* * *

Jay Harris, formerly petroleum engineer at Bartlesville, Okla. for Henry L. Doherty & Co., New York, and former technical editor of Oil Trade Journal, New York, has joined the engineering research staff of the Silent Automatic Corp., Detroit, Mich., manufacturer of the Silent automatic oil burner.

The company is now conducting an extensive research on oil burning appliances under the direction of G. Stanley Miekle, consulting engineer.

* * *

V. P. Donohue, president of the State Motor Service Co., Erie, Pa., has just returned from a tour of the South. He reports that conditions in Florida are unfavorable to those oil marketing companies that are unable to bring gasoline into the state in tankers as rail transportation costs are prohibitive.

* * *

William G. Moore, formerly with the Carson Petroleum Co., New York, is now sales manager of the lubricating oil and was division of the Wilson Oil Corp., New York City.

* * *

W. W. Wray, salesman in the lubricating department for the Skelly Oil Co., Eldorado, Kan., has been transferred from Colorado territory to cover northern Kansas for the company.

* * *

H. C. Reinert, district superintendent for the Sinclair Refining Co., spent several days recently at Athens, O. where he added the business of a service station to the list of Sinclair customers.

* * *

E. J. Grace, salesman for The Texas Co., covering Central Illinois, was recently promoted to agent at Mattoon, Ill.

* * *

E. H. King, formerly agent at Hot Springs, Ark. for the Texas Co., Houston, has been transferred as agent to Jackson, Miss.

Industrial Notes

The Linde Air Products Co., New York, in its house organ, "Oxy-Acetylene Tips," describes the hot oil cooler which is made leakproof by oxy-acetylene welding. It points out the saving of $85 per cooler that one refinery made after coolers had been fabricated by this process to prevent leaks. In this refinery job six all-welded oil coolers were made of 20 foot lenghts of 2 inch pipe which were jacketed with 10 foot lengths of 3 inch pipe. The ends of the latter were heated and hammered to a snug fit and the joints were then made permanently leakproof by welding. The final operation connected the jackets in series which was done by welding sections of 2 inch pipe into holes which had been cut with the blowpipe 4 inches from the end of the jackets.

Flexlume Corp., Buffalo, N. Y., has been awarded compensation by the U. S. court of appeals for the seventh circuit in the litigation between that company and the Opalite Sign Co,. in which the Flexlume charged infringement of its patent covering the standard raised glass letter double face sign.

Pursuant to the ruling of the court, double faced raised glass letter signs made without the license of the Flexlume Corp., and utilizing the principles of cross reflection set forth in the patent, constitute infringement of the company's patents.

The United Car & Equipment Co., Westinghouse Bldg., Pittsburgh, Pa., has been organized by M. A. Herald, who resigned as sales representative of the Standard Tank Car Co., Sharon, Pa. In addition to operating the United Tank Line, the United Car & Equipment Co. will represent the Union Draft Gear Co., the Universal Draft Gear Attachment Co., and other manufacturers, dealing in new and second-hand railroad cars and equipment.

Stuebing Truck Co., Cincinnati, O., and the Cowan Truck Co., Holyoke, Mass., manufacturers of lift trucks and platforms have merged and are operating under the name of The Stuebing-Cowan Co., with headquarters at Cincinnati, O. The Cowan truck division continues operation at Holyoke.

Buffalo Meter Co., Buffalo, N. Y., has placed on the market the Arrow gasoline meter, an improved device for service stations. It has been designed for greater speed, accuracy and dependability and the company claims that the Arrow meter is from 10 to 54 per cent faster in operation by actual tests.

Roy A. Scheiding, formerly with the Caldwell & Taylor Co., Dayton, O., has opened an office at 2227 Brookside Ave., Indianapolis, Ind., for the Sharpesville Boiler Works Co., Sharpesville, Pa., selling Sharpesville storage tanks that are guaranteed for 10 years.

Tests For Oil In Florida Negative; Conditions Not Encouraging

By Paul Wagner
N. P. N. Staff Writer

Article 7 in a Series on Southeastern States

FLORIDA'S oil producing possibilities are, at best, remote. The character and structure of formations underlying the surface in the Peninsular state are generally unfavorable for the origin and accumulation of petroleum deposits

Test drilling in Central Peninsular Florida has indicated that the limestones and marls which reach to great depths below the surface contain little or no bituminous matter; and elsewhere in the state the minor shows of possible oil-forming material have been of such character as to minimize their significance.

Official recognition of the foregoing facts is given in a statement of Herman Gunter, state geologist of Florida, at Tallahassee, who has said:

"Prospecting for oil and gas, even in a state that is classed as productive, is a very hazardous undertaking; and in a state like Florida it must be considered as wildcatting of the wildest type, which should be undertaken only by those who can afford to lose any money so invested."

Although Mr. Gunter does not go so far as to say that Florida is utterly lacking in petroleum possibilities he makes a finely drawn distinction as between the uses of the words "possibilities" and "probabilities."

In the light of the writer's own investigations in Florida, plus the conclusions of others, including Mr. Gunter, it may be said that until more favorable data are disclosed the evidence must be considered as being against, rather than for, the existence of commercial quantities of petroleum in the Peninsular state.

Deep Tests Unfavorable

Three tests drilled to depths below 3000 feet in the Ocala, Tallahassee and Marianna-Chipley areas all provided negative evidence from the viewpoint of oil possibilities. The deepest of these was a test of the Chipley Oil Co., in the northwest quarter of the northwest quarter of 27-4N-13W, four miles south of the town of Chipley, which stopped in salt sand at 4912 feet.

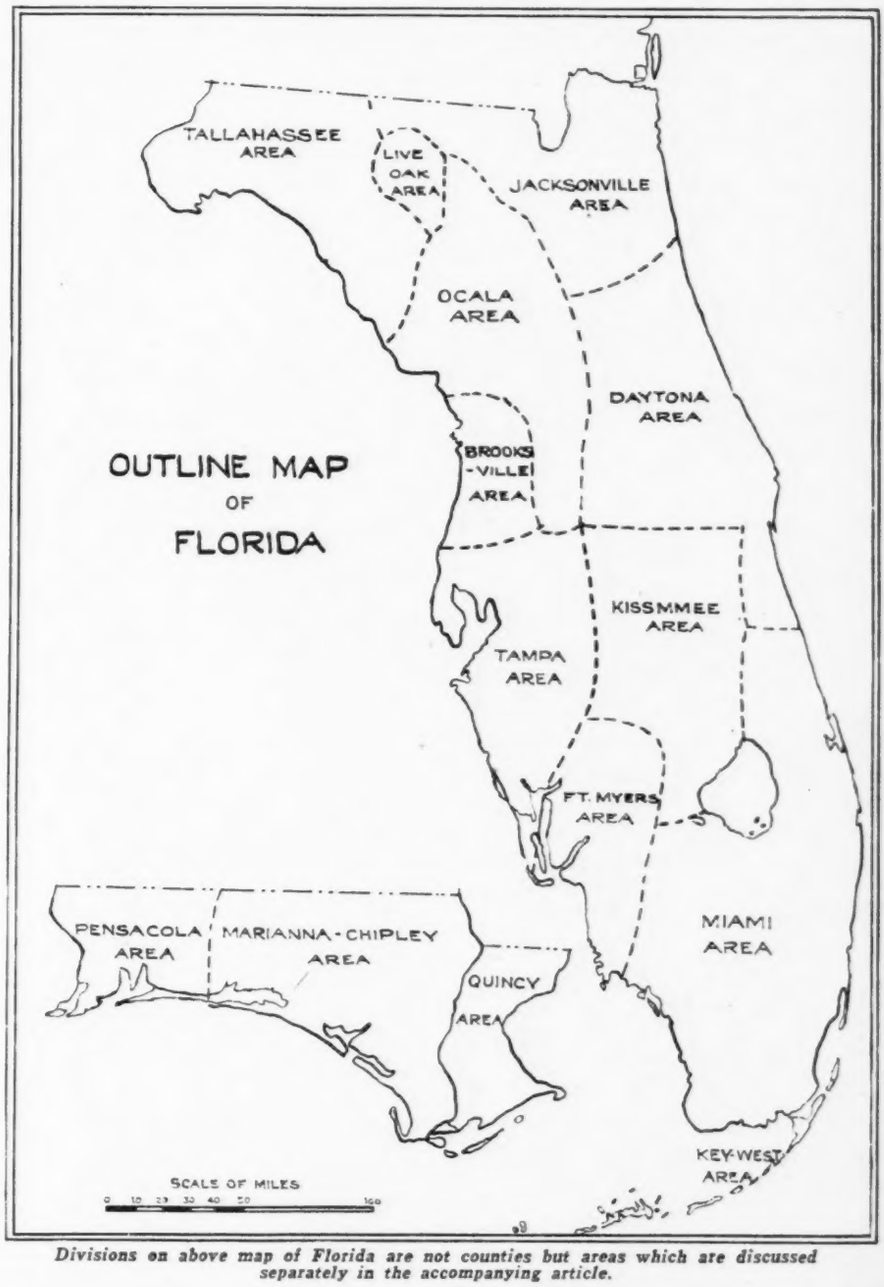
Minor showings of oil from 1526 to 1580 feet, in sticky brown shale, lacked encouragement in the Chipley test because of the absence of adequate structural conditions to influence the forming and accumulation of important deposits. A similar statement may be made with regard to a slight oil show in gray sand at 3534-3539 feet and traces of oil at 3648-3670 feet.

Small shows of gas were logged in light sandy shale at 3130 feet in the Chipley test; along with the oil show at 3534 feet; again in white sand carrying salt water at 3610-3622 feet; at 3648-3670 feet; and at the 3990 and 4666 foot levels.

About $250,000 total expenditure was made on the Chipley test, which was drilled by interests having headquarters at Showhegan, Maine, and said to be closely identified with one of the Standard companies.

Tallahassee Test Abandoned

A well drilled by the Central Florida Oil & Gas Co., about 10 miles southeast of Tallahassee, was abandoned in 1924 at approximately 3500 feet without getting oil or gas showings. This test was backed by turpentine men, Messrs. G. W. Rhodes, W. H. Smith and F. M.



Divisions on above map of Florida are not counties but areas which are discussed separately in the accompanying article.

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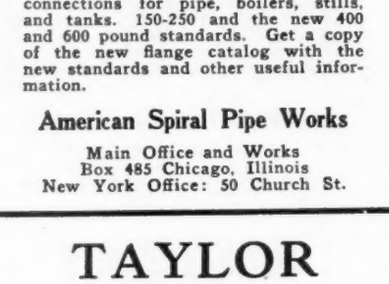

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Phillips, who avoided promotion tactics and financed their own project.

The Ocala district deep test was drilled in 1918 by the Dundee Petroleum Co., an Oklahoma corporation, with which H. B. Goodrich of Tulsa was then affiliated as geologist. It was located about four miles northeast of Bushnell, Sumter county, in 36-20S-22E. The drill was in limestone virtually all the way from 380 feet down to total depth of 3090 feet, where the test was abandoned.

The various limestones penetrated in drilling the Dundee test were originally considered to include Cretaceous horizon, but this provisional interpretation was questioned by geological authorities and has been since that time generally abandoned.

Limestones of Tertiary Age

Only a comparatively thin veneer of younger formations, nowhere exceeding 850 feet in thickness, covers the main mass of older Tertiary limestones that form the entire known underground of Peninsular Florida. The Eocene Ocala, which is equivalent in age to the upper part of the Jackson formation, as defined in Alabama and Mississippi, lies at the surface in many places. The Marianna limestone of the Vicksburg group is recognized as Oliocene.

Below the Marianna and Ocala limestones, where both are laid down, are found undifferentiated Eocene beds which reach to a depth of 2400 feet at Key West, including a thickness of 1550 feet of identical limestones.

Cretaceous Deeply Buried

Cretaceous beds, which outcrop about 250 miles north of the Florida boundary, in Georgia, are most probably present in the underground of the Peninsular state. They are not definitely known, however, to have been penetrated by the drill unless some of the cuttings from the Chipley test may be identified as Cretaceous. At Blakely, Georgia, roughly 60 miles north of the Florida state line, the top of the Cretaceous was reached at about 500 feet (235 feet below sea level), dipping rapidly to the south.

The rate at which this dip continues and the total thickness of the overlying Eocene beds are unknown factors yet to be established from a geological viewpoint. As regards the Eocene limestones from the base of the Olicene down they have been identified as deposits of a clear water sea under conditions adverse to the origin of oil, especially since there has been no warping of formations to cause structure in the sense the term is used in the petroleum industry.

No Evidence of Warping

Gentle doming and broadly anticlinal arches found in Florida represent, as nearly as can be learned, types of surface relief brought about by influences other than warping. These influences

Tabloid Record of Oil Test Drilling in Florida

Company—Location	County	Area	Depth	Remarks
Southern States Lumber Co. Near Cantonment	Escambia	Pensacola	1452	No shows
Pensacola Development Co. 2 tests near Pensacola	Escambia	Pensacola	1620 1702	No shows
R. J. Bruton Interests 7 Miles W. of De Funiak Springs	Walton	Marianna-Chipley	1888	Gas Show reported in shale at 7150-1765 ft.
R. J. Bruton Interests Near Bruce	Walton	Marianna-Chipley	770	Oil show reported at 672-674 feet.
Chipley Oil Co. 4 Miles S. of Chipley	Washington	Marianna-Chipley	4912	Deepest in State.
Calhoun Gas & Oil Co. Near Clarksville	Calhoun	Marianna-Chipley	1320	
Interests Now Unknown Near Greensboro	Gadsden	Quincy	1750	Salt water at 1300 ft.
Bonheur Development Co. 2 tests near Burns	Wakulla	Tallahassee	2169 2000	Asphaltic residue reported in one test at 900 ft.
Central Florida Oil & Gas Co. 10 mi. SE. of Tallahassee	Leon	Tallahassee	3500	No shows
East Coast Oil Co. 10 Miles SW. of Jacksonville	Duval	Jacksonville	?	Abandoned
Dundee Petroleum Co. 36-20S-22E, 2½ Miles S. of Sumterville	Sumter	Ocala	3090	
Pearson Oil & Gas Co. Near Sumterville	Sumter	Ocala	2002	Drilled in 1903
Pearson Oil & Gas Co. Near Crystal River	Citrus	Brooksville	1900	Salt water flow
J. M. Critchlow et al 4 Miles E. of Dade City	Pasco	Tampa	2200	Sulphur water at 2,000 ft.
Winnauma Oil Co. Near Oldsmar	Hillsborough	Tampa	3253	
Robinson & Bell Near Bradentown	Manatee	Tampa	1100	Highly mineralized water; in artesian area.
R. J. Bruton Interests NE. of Palmdale	Glades	Fort Meyers	Drilling	
Florida Exploration Co. 10-45S-26E	Lee	Fort Meyers	2025 (?)	
House, Martin & Harris 17-54-41	Dade	Miami	No authentic data.	
Consolidated Oil Co. 21-53-41	Dade	Miami	No authentic data.	
Kissimmee Oil Co. 10 Miles S. of Kissimmee	Osceola	Kissimmee	2000	No fossils in limestone beds.
Polk Oil & Gas Co. 25-27-24	Polk	Kissimmee	720	Depth at last report
Isaac Van Horn & Co. 21-20-22	Polk	Kissimmee	523	Depth at last report.
Florida East Coast Oil, Gas and Mineral Co. Near Melbourne	Brevard	Daytona	1000	Abandoned

may have been the shoaling of the clear water sea in some time intervals of deposition and erosion in others.

It has been pointed out on unquestioned authority that a gentle doming of the beds in northwestern Florida reaches its broad apex in the Lower Oligocene and Ocala outcrops of Marion, Citrus and Hernando counties, but this cannot be called warping.

The dominant structural feature of eastern Florida was described in a press notice issued by the United States Geological Survey in 1920 as an arch trending south-southeasterly and forming the axis of the peninsula. The axis of this arch passes near Live Oak, 10 to 20 miles west of Gainesville, and an equal distance west of Ocala. It is described by the geological survey as "the southern continuation of the broad anticlinal area of south central Georgia."

High Areas Described

Along this arch the geological survey has described two high areas as follows:

"The highest part of one, called the Ocala uplift, appears to be in eastern Levy county; that of the other is near Live Oak. The Ocala uplift is the larger and the higher. On this uplift the Ocala limestone is found 125 feet above sea level. From that elevation it dips toward the east to a depth of 200 feet below sea level at St. Augustine and 500 feet below sea level at Jacksonville.

"The Ocala uplift is separated from the uplift near Live Oak by a low area, or saddle, which runs parallel to the axis of the anticline to a point near Santa Fe river, in southern Columbia county. From that point the beds appear to rise gently to form a dome shaped fold near Live Oak."

West of the Apalachicola river, in that part of Florida which adjoins Alabama, are located the Marianna-Chipley and Pensacola areas. Dips of formations and their character at the surface were sufficient to cause Messrs. E. H. Sellards and Herman Gunter to separate these areas from the rest of the state in making up their report for the Florida Geological Survey, in 1922, at which time they dicussed data obtainable with regard to possible oil prospects.

Other divisions of the state were made for physiographic reasons, or because of surface geology not especially pertinent to the present discussion. It has been convenient, however, to utilize these divisions of areas in the accompanying sketch map of Florida, which may be referred to in connection with a tabloid history of test drilling in various parts of the state.

Promoters Back of Tests

Many of the test wells drilled in Florida have smacked strongly of promotions and it is known that the backers of one such enterprise profited to the extent of some $150,000 from acreage sales after reporting an oil showing that was never substantiated by authentic data and which test was in a geologically improbable area.

The Florida law covering promotions is unusual. Under its provisions stock sales may be carried on in the county where a test well is being drilled without the company coming under the jurisdiction of the state "blue sky" law. If stock is sold outside the county where the test is drilled and where the principal office of the Company is located then the "blue sky" law becomes effective.

Companies or syndicates selling stock outside of the county where such principal office is located come under the domestic investment features of the "blue sky" law; or if such company is organized under the laws of any other state, territory or country it comes under the foreign investment classification.

What Law Requires

The Florida law requires a statement showing in full detail the plan upon which a company proposes to transact business; a copy of all contracts, bonds, stocks or other instruments which it proposes to make with or sell to its contractors; a statement which shall show the name and location of the investment company; an itemized account of its actual financial standing, showing the amount, character and location of its property and its liabilities; and such other information touching its affairs as the comptroller may require.

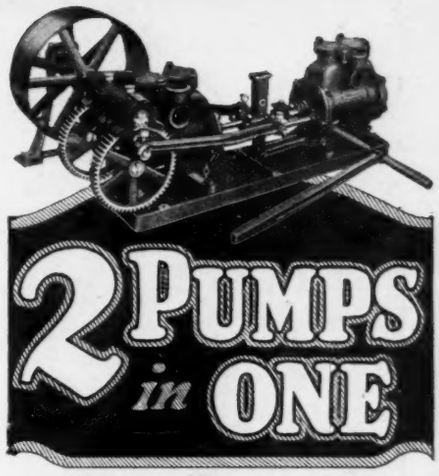
In the case of foreign investment companies they shall also file with the comptroller written consent, irrevocable, that actions may be commenced against it in proper court of any county in the state in which cause of action may arise, or in which the plaintiff may reside, by the service of process upon the comptroller and stipulating that such service of process shall be taken and held in all courts to be valid and binding as personal service upon the company itself.

Provision is made in the law for the comptroller and the attorney general to examine and pass upon statements filed by investment companies; and while they are not required or permitted by law to recommend the securities offered for sale the comptroller and attorney general shall issue a statement reciting compliance with provisions of the "blue sky" law or they shall deny the investment company the right to sell or offer for sale any of its securities within the state.

BEAUFORT, S. C.—The auto marine station of the Standard Oil Co. of New Jersey, located here, is being operated by the company and has its dock ready to supply boats, filling stations or automobiles.

Large signs have been erected by the company on Beaufort River calling attention to the auto marine station.

CINCINNATI, O.—Frank E. Schuerman, distributor for The Tresler Oil Co. here, reports consumer tank wagon deliveries are holding up well through the winter season.



-One Gasoline
-One Kerosene

Both are mounted on a one-piece cast iron base with power jack attached. Easy to install. Will operate without vibration or movement on any kind of foundation.

Either pump may be connected to the cross-head by two machine bolts and operated separately or together.

Cast iron base under pumps forms oil pan which is tapped for drain pipe, insuring a safer and cleaner pump house.

Plunger, slow speed, and packed with special cup leathers—a special safety feature.

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Oil Pumps

Simple in construction, easily installed and easily kept in continuous service by the average operator. Designed for the continuous pumping of kerosene, distillate and gasoline. Made for hand power, engine power, or electric power; belt or gear drive.

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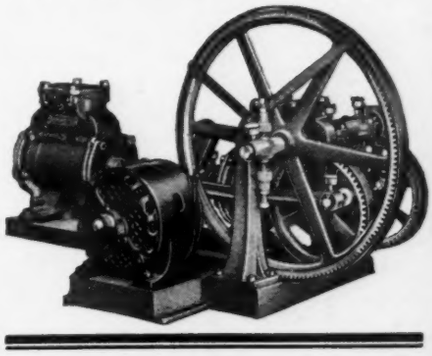
Distributors: **Sharpsville Boiler Works Co. Sharpsville, Pa.**

Builders of satisfactory pumps and pumping equipment for over 40 years.



Scouting the Lobbies

National Petroleum News

Officers of the Montana chapter, Rocky Mountain Oil & Gas Association. (1) E. B. Coolidge, president; (2) C. H. Brown, vice-president, representing marketers; (3) A. Judson Findley, vice-president, representing producers; (4) M. C. Henderson, vice-president, representing refiners; (5) Walter F. Brittan, secretary.

THE Lobby Scout will for this issue devote his attention exclusively to the officers of the Montana chapter, Rocky Mountain Oil & Gas Association. The purpose of this is two-fold. They are leaders in the industry of their section of the country and they should be presented to the oil men elsewhere, who are becoming more and more interested in the possibilities of the vast Northwest.

These officers were chosen at the recent annual meeting of the Montana association, held in Great Falls. The parent organization has been in existence for some time and has held its meetings in Casper. Montana's membership in the Rocky Mountain association became so large that it was necesary to make a division, in the same way that the Mid-Continent Oil & Gas Association functions through state organizations.

EDWIN BREMER COOLIDGE is the new president of the Montana association. Don't inquire for him under that name, though, as you will arouse merely a look of bewilderment on the part of the Montana oil man inquired of. The correct designation to employ is "Hardrock" Coolidge.

He was born in Plattsmouth, Neb., June 17, 1884. His education included public schooling at Columbus, Neb., where he was graduated from high school. He attended the South Dakota School of Mines from 1902 to 1906 and received the degree B. S. in mining engineering; in 1908 he received his E. M. degree in the same school. Subsidiary educational courses taken during his formal schooling included work as a newsboy while in the public schools and an engineering apprenticeship with the Homestake Mining Co., of Lead, S. D., during college vacations.

Mr. Coolidge came to Montana in 1906 and engaged in that most romantic of mining professions, gold mining. This was no life of the itinerant prospector, so dear to the fiction writer of East Hohokus, N. J. Mr. Coolidge entered the employ of a company, regularly organized for the extracting of gold and run on strictly business and scientific principles. This was the Kimberly Gold Mining Co., and his station was Jardine, Mont. In the same year he opened an engineering office in Cook City, Mont., and went to Kendall, Mont. in 1907 with the Kendall Gold Mining Co.

Another term of employment was with the Cumberland Mine, Maiden, Mont., where he served as mill superintendent from 1909 to 1910. Then he started in for himself, taking over old gold properties. He operated the Spotted Horse, Gilt Edge and Cumberland mines from 1909 to 1919.

In the latter year the currency inflation hit the gold miners and Mr. Coolidge was forced to suspend operations. He then turned to oil and entered the Cat Creek field in the spring of 1920. With associates he set up the Montacal Oil Co. and in the fall of the same year he organized the Homestake Oil Co., operating in the Cat Creek, Blackfoot, Kevin and Bowdoin, Mont., districts and in the Salt Creek and Elk Basin fields of Wyoming. In 1925 he organized the Hardrock Oil Co. and helped organize the Consumers Gas Co. and the Treasure State Pipe Line Co., all operating in the Kevin-Sunburst field. The Texas Pacific coal and Oil Co. in 1923 acquired a substantial interest in the Homestake company and has recently added to that interest.

Mr. Coolidge maintains offices in Great Falls.

THE Montana chapter of the Rocky Mountain Oil & Gas Association embraces the producing, refining and marketing divisions of the industry and each division is represented in the official family. The vice-president who represents marketers is C. H. Brown, who is in charge of the sales and distribution of the Arro Oil & Refining Co., which company has a 2000-barrel refinery at Lewistown Mont., and operates a number of filling and bulk stations.

Mr. Brown started in the oil business in 1890 with the old Waters-Pierce Oil Co. at St. Louis. He was then assigned to territory in Arkansas and Texas. In 1908 he moved to Montana and was in the sales department of the Continental Oil Co. from that time to 1920. In 1921 he became associated with the Arro company.

THE refiners are represented by Vice-President M. C. Henderson. The wholesale grocery and banking businesses in Idaho and Washington claimed his attention prior to 1910. In that year he came to Great Falls and in 1912 joined the Pure Oil Co. of Minneapolis (since acquired by the larger Pure Oil Co.). He took charge of the Pure's business in Montana and played a large

part in building up an extensive marketing organization in the state.

In 1914, Mr. Henderson left the Pure and as secretary and general manager helped to organize the Montana Oil Co. which presently became the second largest marketer in the state. The company operated for five and one-half years and was then purchased by the Mutual Oil Co. The Montana Oil Co. was financed by the Sen. T. C. Power interests.

After the Mutual bought the company, Mr. Henderson went with the Utah Oil & Refining Co. and had charge of their Northwestern business. This was a successful venture for the Utah company and the association continued until control was acquired by the S. O. of Indiana in 1921.

Ensued, then, a period of absence from the oil business on the part of Mr. Henderson until 1923, when the Sunburst Refining Co., newly organized, induced him to come with them as assistant manager. Shortly afterward he became manager. This is now the principal refinery in the state.

Mr. Henderson has naturally, through his long service as a builder of the oil industry in Montana, become possessed of a wide acquaintance and a considerable share of the credit for stabilizing marketing conditions is his.

A. JUDSON FINDLEY, vice president of the association, grew up on the farm among the oil and gas fields of West Virginia. When Mr. Findley was asked to explain his six foot three size, he said "It is because I was raised among the bluegrass hills of West Virginia where there was plenty of milk, butter and fruit." His ancestry moved from eastern Virginia to western Virginia near Clarksburg in 1801 where they continued to reside. His father, Frank Findley, was a Confederate Soldier, crippled in service and died when his son was but a small boy, thrusting upon him family responsibilities.

The educational work of Mr. Findley was done in the public schools, secondary schools and University of West Virginia, where he also qualified for the legal profession. He was engaged about four years in title work for sundry coal companies and oil companies. He spent three years in the legal department of the Tidewater Railway, now the Virginian Railway, holding with it a position of responsibility and trust. He went into general practice in Clarksburg in 1908, forming a law partnership with S. E. W. Burnside, now attorney for the Hope Natural Gas Co. and kindred companies in the Pittsburgh office. He was prosecuting attorney for Harrison county, West Virginia from 1912 to 1916. In 1919 he entered the employ of E. A. Durham interests in the oil and gas business. He is now attorney and vice president of the Western Petroleum Exploration of which E. A. Durham is president and which company is a subsidiary of the Petroleum Exploration, and which is now operating in Montana.

Mr. Findley has been an active worker in the Montana Chapter of the Rocky Mountain Oil & Gas Association, and was its first president. He presided over the recent annual meeting and declined a second term because of the press of company business. He lives in Great Falls.

WALTER F. BRITTAN, secretary of the Montana association, is somewhat of a newcomer in the petroleum industry. Previous to coming to Montana in 1923, he had held important executive positions with two of the leading grain firms in the United States. He entered the employ of the Rosenbaum Grain Corp. of Chicago as a boy, leaving them in 1914 to become associated with the Union Terminal Elevator Co. of Minneapolis on a partnership basis and as manager of their grain department.

Mr. Brittan became interested in Montana oil development in 1921, and with the assistance of several members of the Minneapolis Chamber of Commerce, entered into considerable exploration and development work in this state.

With the organization of the Montana division of the Rocky Mountain Oil and Gas Association in May 1925, he was elected secretary and has taken over the active organizing and protective work of this body.

Mr. Brittan is an ardent believer in the adage that history repeats itself, and cites innumerable facts to prove his contention as to the petroleum industry being fundamentally closely related to the grain industry. He points out that abuses in the oil business will just as surely bring about government supervision, bureaucratic control or other unwanted intrusions as such factors did to the grain trade.

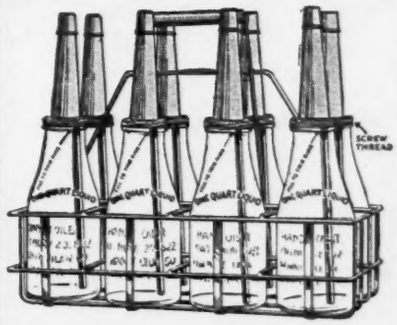
He believes that petroleum association work can only be effectively perpetuated by the co-operation of all branches of the Industry, and by all companies in each of these respective divisions contributing actively to the association work.

The Montana organization which he is sponsoring is composed of producers, refiners, marketers and transportation companies, operating in Montana. So called "Standard" and "Independent" companies meet here, if not in brotherly love, at least in honest appreciation and respect of each other.

KINGSLEY CROSBIE, secretary and treasurer of Crosbie Bros. Oil Co., Gibson City, Ill., has just returned from a two weeks, visit at New York and Boston. Mr. Crosbie states that he finds the price structure more stable in that section than in Illinois.

LOUIS W. MAY, vice president and general manager of the Pioneer Asphalt Co., Lawrenceville, Ill., accompanied by Mrs. May and son Martin, of Vincinnes, Ind., left on Jan. 11 for Phoenix, Ariz., where they will spend the winter. They will stop at New Orleans for several days enroute.

The Handy Oiler



THE public today demands that you give them quick, clean service. This you can do by dispensing your lubricating oils with Handy Oilers, and improve the most valuable asset to your business, "Service".

Handy Oilers are marked to pass the inspection of the Division of Weights and Measures in each state where sold.

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Handy Oiler Container and Spout	1.00
Basket	2.50
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Gasket	.05
Dust Cap	.10

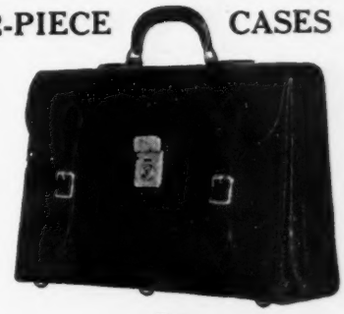
Manufactured by

Handy Oiler Co.

Danville, Indiana

Purchase from your jobber if possible. If he will not supply you, we will ship direct.

2-PIECE CASES



393 Folio and inner Case, Net $14.85

Made from heavy black cowhide with stiffened bottom, reinforced with metal studs. Extension lock and strong, comfortable handle. There are 3 roomy pockets for stationery and Inner Case, which has a handle and may be carried separately. It is velvet lined with compartment containing 9 four oz. bottles and 4 one half oz. jars. Your name embossed in gold *free*. Satisfaction guaranteed or your money returned.

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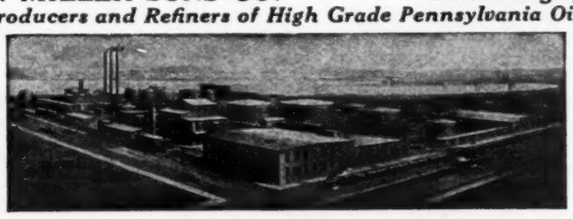

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PENNSYLVANIA MOTOR OILS, Blended to suit Jobbers' specifications. In tank cars, steel drums, wooden barrels.

VISCOUS PALE NEUTRAL OILS, KEYSTONE PAINTERS' SPIRITS. All grades WATER WHITE OILS, MINERAL COLZA, GASOLINES, etc.

Cable Codes: Western Union (Universal) ABC (4th and 5th Edition, Private Codes) Established 1862

New Oil Station Construction

Melvin, Ill.—Crosbie Bros Oil Co. is building drive-in service station and bulk plant, and will build warehouse offices and filling station at Gibson City, Ill., in the spring, according to Kingsley Crosbie, secretary and treasurer.

* * *

Portsmouth, O.—The Automotive Supply Co. building filling station, to cost about $25,000 according to C. A. Sennett, secretary and treasurer.

* * *

Columbus, O.—The Columbus Oil Co. is building two filling stations here.

* * *

Daytona, Fla.—Sinclair Refining Co. building $10,000 filling station.

* * *

Dalton, Ga.—Dalton Auto & Machine Co. erecting filling station.

* * *

Birmingham, Ala.—Marx & Kayser building filling station.

* * *

Miami, Fla.—Seaboard Oil Co. to erect eight filling stations.

* * *

Dodge City, Kan.—A. A. Bethel to build filling station.

* * *

New Madrid, Mo.—L. B. Pinnell to build filling station.

* * *

McAlester, Okla.—J. L. Horne to build filling station.

* * *

Bainbridge, Ga.—Brooks Oil Co. to erect filling station.

* * *

East Tawas, Mich.—Roy Roby erecting filling station.

* * *

Bainbridge, Ga.—Brooks Oil Co. erecting filling station.

* * *

Enid, Okla.—B. O. Walker to build filling station.

* * *

Haskell, Tex.—P. F. Barham building filling station.

WESTON, W. VA.—The Tulley-Crimm Hudson-Essex Company will soon occupy a new building here. The company is expecting to make a drive on gasoline sales by offering an Essex coach as a premium. Details of the offer have not been made public yet.

WESTON, W. VA.—J. L. McQuain, who operates a taxi service here, has opened a garage and will handle Star cars, and Waverly gasoline, oils and greases.

SALEM, O.—Vahey Oil Co., Youngstown, O. started wrecking of a historic building in preparation for a filling station.

ON THE LAZY BENCH

National Petroleum News

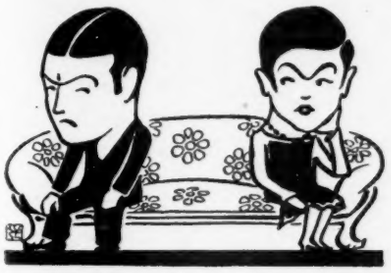
A Joint Meeting

Two Irishmen had just laid a wreath of flowers on a comrade's grave, and while crossing another section of the cemetery they saw a Jap lay some rice on the grave of a countryman.

One of the Irishmen asked, "When do yez expict yer friend to come up and eat th' rice?"

"When your friend comes to smell the flowers," was the quick reply.

—Flash Points



SO'S YOUR OLD MAN!

"A little bird told me what kind of a lawyer your father was."
"What did the bird say?"
"Cheep, cheep."
"Well, a duck told me what kind of a doctor your old man was."

❦ ❦ ❦

An old colored man attended a movie for the first time. When he came out he was asked:

"Well, uncle, did you enjoy the picture?"

"Oh, yes," he replied, "the picture was all right, but the piano made so much noise I couldn't hear a word they said."

—Magnolia Oil News

❦ ❦ ❦

Why She Crowned Him

Wife (with newspaper): "It says here that men grow bald because of the intense activity of their brains."

Hubby: "Exactly. And women have no whiskers because of the intense activity of their chins."

❦ ❦ ❦

Guest—So you had difficulty in finding me, eh? Didn't your master describe me?

Chauffeur—Yes, sir, but there are so many gentlemen with red noses.

❦ ❦ ❦

Stranger—"Is Mr. Steedy in?"

Boy—"No. 'E's gone to the cemetery."

"Do you expect him back soon?"

"Not likely. 'E's dead."

❦ ❦ ❦

"You the 'stallment man?"

"Yeh."

"Well, Mom sent me to stall you off again."

What Happened to Lil?

A note book was found on the alleys this week and the following are some of the notations found in it marked under office expense:

Oct.	3—Adv. for girl stenog.....	$ .50
"	6—Violets for new stenog....	.65
"	8—Week's salary for new stenog.	15.00
"	11—Roses for new stenog. ...	3.00
"	15—Week's salary for new stenog.	20.00
"	15—Candy for wife over Sunday	.75
"	19—Lunch with Miss ——....	10.65
"	22—Lillian's salary	25.00
"	25—Theatre and supper with stenog.	22.50
"	26—Fur coat for wife.....	625.00
"	26—Adv. for male stenog.....	.50

❦ ❦ ❦

No Cause for Alarm

"Where is Henry?" asked the neighbor of the lady whose husband he wanted to see.

"I'm not sure," she replied, calmly. "If the ice is as thick as he thinks it is, he's skating. If it's as thin as I think it is, he's swimming."

❦ ❦ ❦

Suggested Stationery

For the Aviator—Fly paper.
For the Sheik—Sand paper.
For the Motorist—Carbon paper.
For the Hijacker—Bond paper.
For the Pugilist—Wrapping paper.
For the Banker—Note paper.
For the Suicide—Newspaper.
For the Student—Copy paper.
For the Undertaker—Crepe paper.
For the Politician—Oil paper.

❦ ❦ ❦

Binks (phoning down from his room)—"Night clerk?"

Snippy Clerk—"Well, what's biting you?"

"That's what I want to know."

❦ ❦ ❦

Looked Like It

Willis—What kind of a dog is that one of yours?

Gillis—Police dog, I guess. He's always hanging around our cook.

❦ ❦ ❦

Monkey: "Does your mother still wash for Mrs. Lock?"

Glands: "Why, my mother never washed in her life."

❦ ❦ ❦

"I'd be much better off if they'd put that sign on the mail box."

"What sign?"

"Post no bills."

A Los Angeles Special

A customer stepped into a Los Angeles hardware store.

"I want to get one of those thermometers like the Chamber of Commerce uses," he announced.

"And what kind is that?" asked the clerk.

"It's one that won't go above 80 in the summer or below 50 in the winter.

❦ ❦ ❦

After-Effects

The doctor told Jones not to stay out late at night.

"You think the night air is bad for me, Doc?"

"No," said the physician, "it isn't that. It's the excitement after getting home that hurts you."

❦ ❦ ❦

"I say, James, why this delay?"

"A flat tire, sir."

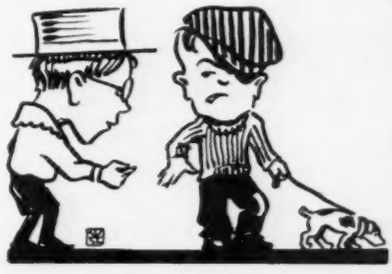
"You must be more careful. That last pedestrian we ran over must have had a flask on his hip."

❦ ❦ ❦

Flip—My uncle has addressed half the people in the United States.

Flap—He must be a wonderful orator.

Flip—Oh, no, he mails catalogs for Sears-Roebuck.



ANOTHER SPECIALIST

"Does your dog chase cows?"
"Naw! He's a bull dog."

❦ ❦ ❦

Flapper Music

With rings on her fingers
And bells on her galoshes
Milady makes music
Wherever she sloshes.

❦ ❦ ❦

Man is but a worm. He comes along, wiggles a little in the dust. Then some chicken gets him.

—Magnolia Oil News

❦ ❦ ❦

She—"How is it that widows generally manage to marry again?"

He—"Because dead men tell no tales."

—Flash Points

SINCLAIR OILS

THE SINCLAIR dealer is more than merely a customer of the Sinclair Refining Company. With each sale to him there goes the assurance of our help in his own selling problems, whenever he requests it. He is related to us as one Sinclair Department is to another.

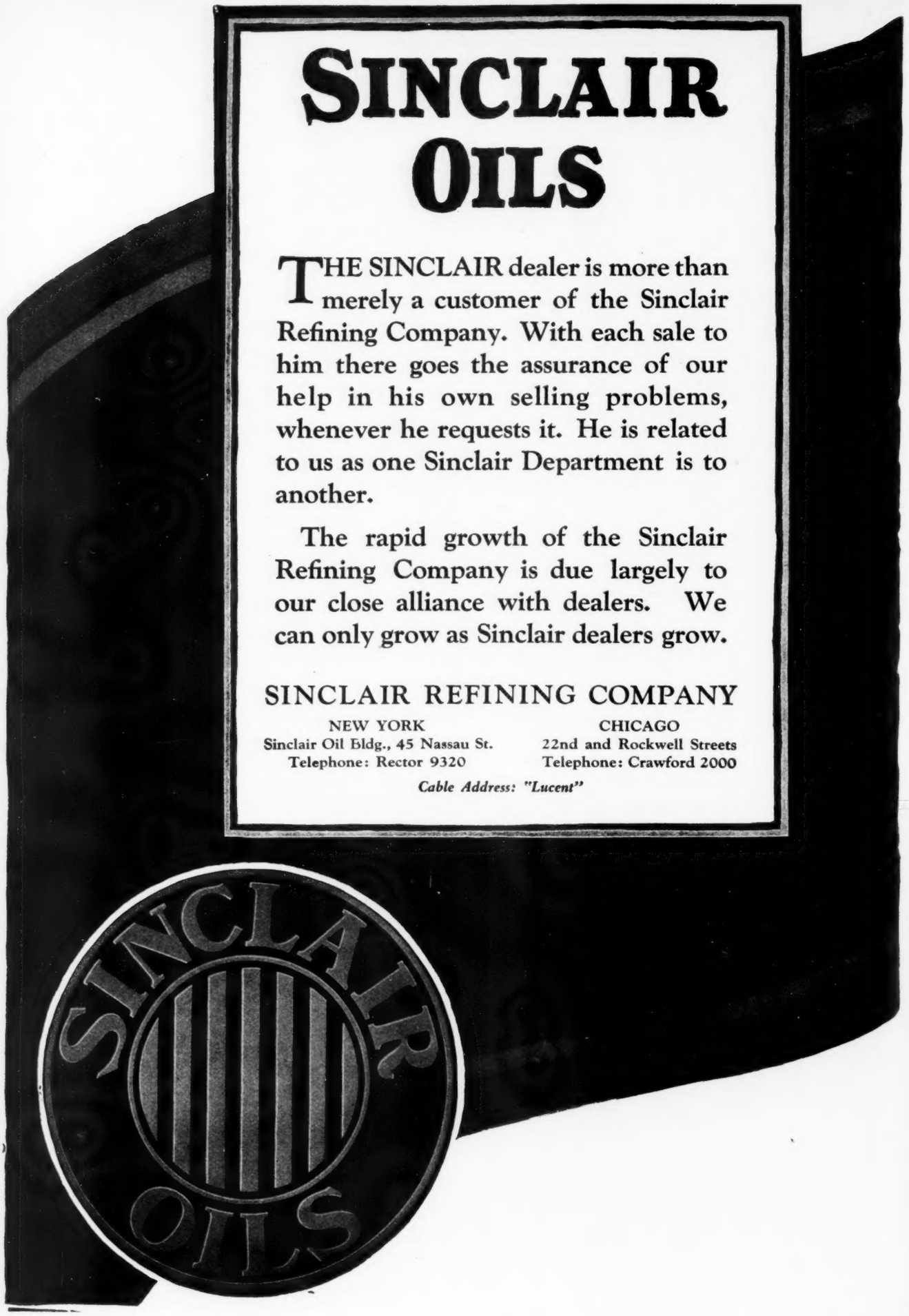
The rapid growth of the Sinclair Refining Company is due largely to our close alliance with dealers. We can only grow as Sinclair dealers grow.

SINCLAIR REFINING COMPANY

NEW YORK
Sinclair Oil Bldg., 45 Nassau St.
Telephone: Rector 9320

CHICAGO
22nd and Rockwell Streets
Telephone: Crawford 2000

Cable Address: "Lucent"



Refinery - Tank Wagon Markets

National Petroleum News

Light Domestic Demand Weakens Gasoline in Mid-Continent

Staff Special

TULSA, Jan. 18

MID-CONTINENT gasoline markets are weaker as the result of an almost complete lack of buying for domestic movement during the last week. Exporters have continued to purchase high gravity goods in fair quantities and refiners are now well supplied with orders for 64-66, 375 end point for shipment over the remainder of January.

Natural gasolines have been even weaker than straight run material. Manufacturers are getting caught up with others so that they are being compelled to increase their offerings on the spot market.

Kerosenes are no more plentiful than they have been for the last month and a half. Prices advanced again during the week. Distillates continue soft in spite of a fair movement but gas oil is in good demand. Fuel oil has slipped since buyers have failed to show any interest in the market.

Jobbers Out of Market

It is difficult for refiners to believe that demand for 58-60 U. S. Motor gasoline can be as slack as it has been so far this month unless jobbers are having their requirements filled from some other refining center. Orders reaching the field have been in one or two car lots only and the total number of these is far from satisfactory.

Some refiners have gone as far as to check around to see whether their customers have been buying elsewhere. Their investigations have shown that the jobbers are sending their business to Group 3 but that they are only buying from day to day as their needs are apparent. Weather conditions have cut into retail gallonage enough to account fully for the present slow market.

There is little difference between the present situation and that found a year ago in January. The only difference is that a year ago exporters were inclined to buy more 58-60 U. S. Motor gasoline along with the 64-66 than they have so far this month.

Production and Shipments Up

An analysis of weekly reports compiled by National Petroleum News from figures gathered from refiners in the Mid-Continent shows that for the six weeks ended Jan. 8, 124 refiners produced 179,526,626 gallons of gasoline and shipped 162,768,505 gallons.

In the corresponding six weeks a year ago 117 plants produced 152,273,875 gallons and shipped 142,216,428 gallons. Production this year is thus 11.4 per cent greater than a year ago and shipments are 14.4 per cent greater. Daily average crude runs for the six weeks ended Jan. 8 this year have been 249,220 barrels while in the same period a year ago daily average runs have been 235,470 barrels. The increase in crude charges is thus only 5.8 per cent over a year ago reflecting better manufacturing methods of refiners during the year.

Gasoline stocks have been accumulating a little more rapidly during December and the early part of January than they did a year ago but the Mid-Continent field is still in a much better statistical position than any other refining area in the country. A small reduction in present crude charges would be of advantage in maintaining gasoline prices at about their present level. It is to be expected that gasoline stocks will build up materially during the next two or three months but the slower this process of building up the better refiners will be able to maintain their prices.

Motor Prices Lower

At the beginning of this week 58-60 U. S. Motor gasoline was selling in Group 3 at a flat price of 10 cents per gallon. As the week progressed without any increase in business weak spots appeared. Resale buyers are now able to find some goods at 9¾ cents per gallon and the bulk of the sales are being made at 9⅞ to 10 cents.

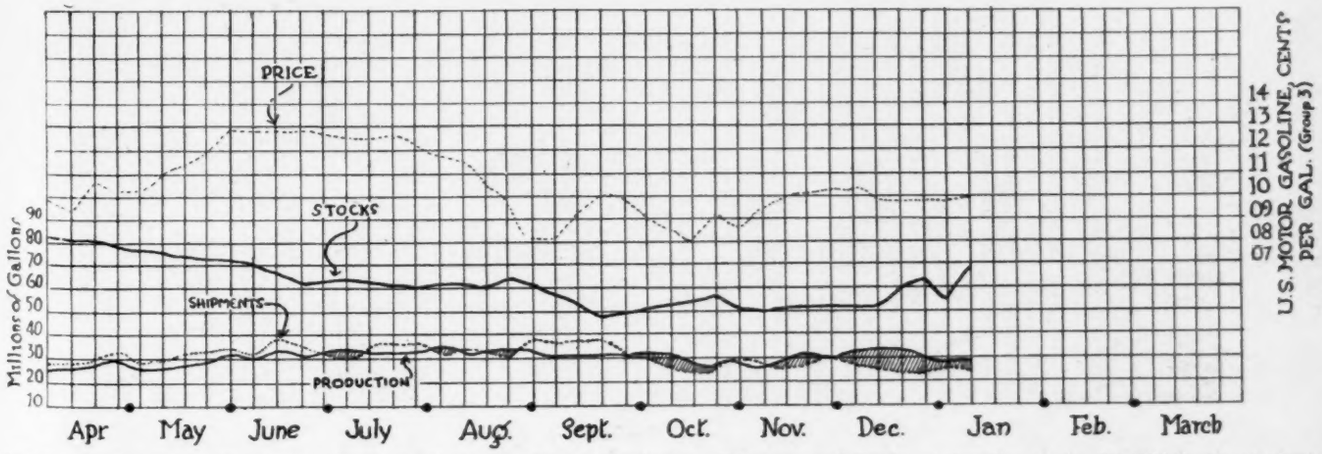
Export inquiries for 64-66, 375 end point gasoline were received by refiners again this week and the new sales completed kept prices in Oklahoma at 12¼ to 12½ cents per gallon. The 60-62, 400 end point grade, likewise, held firm through the week.

North Texas markets have passed through the week about like Group 3. U. S. Motor gasoline and 58-60, 450, have been slow and weak while 64-66, 375 end point export gasoline has been firm at 12½ to 12⅝ cents with refiners well supplied with orders for the remainder of the month.

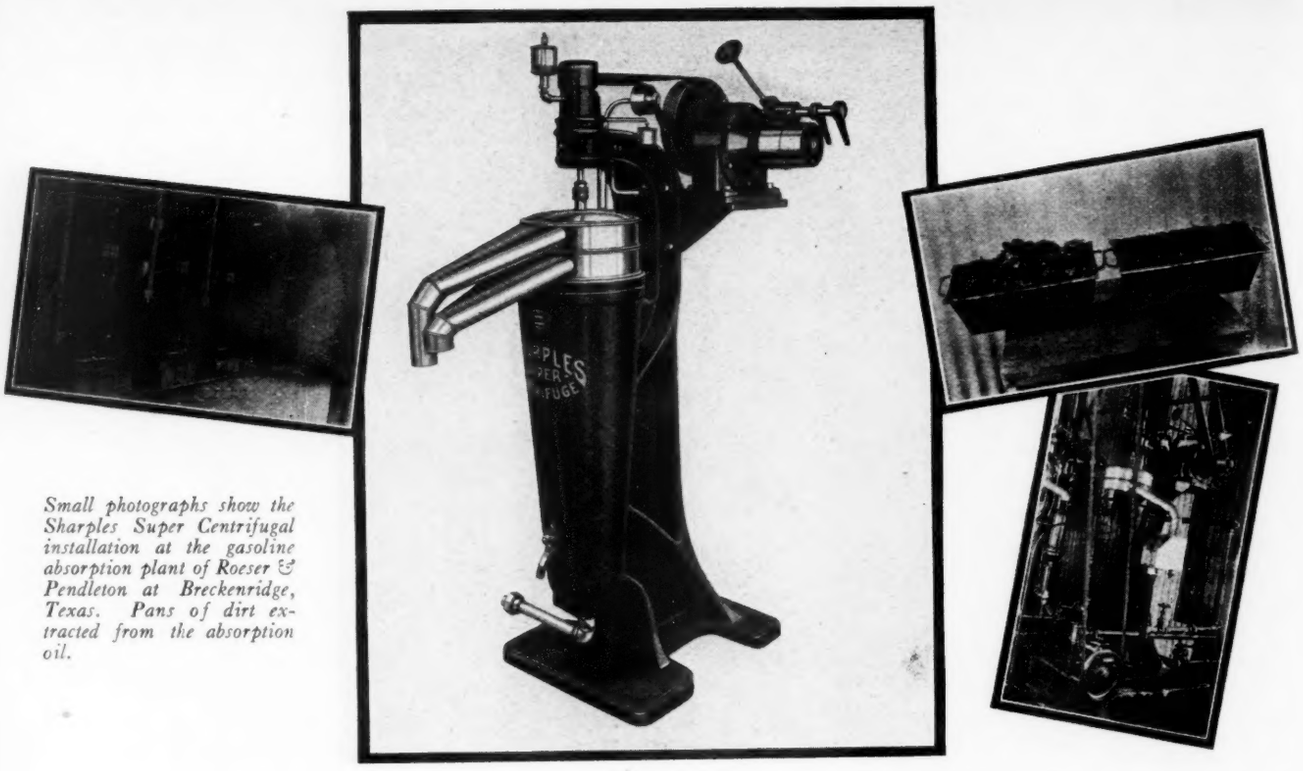
Business has been fairly good in the Arkansas and north Lousiana refinery markets with all products holding firm.

(Continued on page 117)

Barometer of the Mid-Continent Gasoline Market



Relation of the Group Three price of U. S. Motor Gasoline to Production. Shipments and Stocks of Gasoline at the 124 Mid-Continent plants reporting their figures weekly to National Petroleum News.



Small photographs show the Sharples Super Centrifugal installation at the gasoline absorption plant of Roeser & Pendleton at Breckenridge, Texas. Pans of dirt extracted from the absorption oil.

SHARPLES CERTAINLY PLAYS AN IMPORTANT PART IN ELIMINATING SHUT-DOWNS

In a very few words this is what the Sharples Super Centrifuge will do in an absorption plant:

1—It minimizes the necessary absorber cleaning

2—Reduces the possibility of discolored gasoline

3—Lessens accumulation of dirt in stills

4—Avoids interruption due to cleaning absorbers and stills

5—Lowers loss of oil in the system

6—Reduces consumption of new mineral seal oil

7—It is used in reconditioning lubricating oil in the power units and clarifying fuel oil in internal combustion engines

The introduction of the Sharples Super Centrifuge into this field makes it possible to produce gasoline at a higher efficiency by continually keeping the absorption oil in the system free from sludge, water and dirt. It is a recognized fact that sludge deposits cause frequent shut-downs; and water lowers the efficiency of the absorption oil and causes trouble in the pipe lines.

The Sharples Super Centrifuge cleans up the system with remarkable rapidity, and helps to produce gasoline that is free from the discoloration caused by impurities in the mineral seal oil.

Let Sharples Engineers send you full details on the economies effected by this system.

THE SHARPLES SPECIALTY COMPANY, 2354 WESTMORELAND STREET, PHILADELPHIA. Boston, New York, Pittsburgh, Chicago, Detroit, Tulsa, New Orleans, San Francisco, Los Angeles, Seattle. London, Paris, Tokio.

SHARPLES
A GREAT FORCE
SUPER CENTRIFUGAL FORCE

Refinery Markets on Light Oils and Lubricants

Pennsylvania, Oklahoma, North and South Texas, Louisiana, Arkansas, California

GASOLINE AND NAPHTHA

PENNSYLVANIA	Prices Jan. 18	Prices Jan. 11	Prices Jan. 4
52-54 Naphtha	11¾-11½	11½-11¾	-11½
54-56 Naphtha	11½-12	11¾-12	-11¾
58-60 Gasoline	12 -12½	12½-12¾	12¾-12½
60-62 Straight-run gasoline	13 -13½	-13½	-13½
62-64 Straight-run gasoline	-14	-14½	-14½
64-66 Straight-run gasoline	14½-15	15 -15½	15 -15½
68-70 Straight-run gas. 350-360 E.P.	-16	-16	-16
68-70 Straight-run gas. 305-320 E.P.	-19	-20	-20
70-72 Straight-run gas. 300-305 E.P.	-20	-21	-21
OKLAHOMA			
48-50 450 E. P. naphtha	8¾- 9	- 9	- 9
50-52 450 E. P. naphtha	9 - 9¼	- 9	- 9
56-58 450 E. P. gasoline	9¼- 9½	- 9½	- 9½
56-58 U. S. Motor gasoline	9⅜- 9⅝	- 9¾	9½- 9¾
58-60 U. S. Motor 437 E. P.	9¾-10	-10	9¾-10
60-62 400 E. P. gasoline	11¼-11½	11¾-11¾	-11¾
64-66 375 E. P. gasoline	12¼-12½	12¼-12½	12⅜-12¾
68-70 350-360 E. P. gasoline	13¼-13½	13¼-13½	13¼-13½
64-66 437 E.P. blend	10 -10⅛	-10¼	10¼-10⅜
KANSAS*			
56-58 450 E. P. gasoline			
58-60 U. S. Motor gasoline	-10¼	10¼-10½	10¾-10¾
60-62 400 E. P. gasoline	11¼-12	11¼-12	11¾-12
64-66 375 E. P. gasoline	13 -13¼	13 -13¼	13 -13¼

*F. O. B. refinery, Kansas destination.

NORTH TEXAS			
48-52 450 E. P. naphtha	- 9	- 9	- 9
56-58 450 E. P. gasoline	- 9¼	9¼- 9¾	9¾- 9¾
58-60 450 E. P. gasoline	9⅜- 9⅝	9½- 9⅝	9½- 9⅝
58-60 U. S. Motor gasoline	9½- 9⅞	9⅞-10	9¾-10
60-62 400 E. P. gasoline	11⅜-11⅝	11¾-11¾	11 -11¼
64-66 390 E. P. gasoline	-12¼	-12¼	11¾-12
64-66 375 E. P. gasoline	12½-12⅝	12½-12¾	12 -12¼
68-70 350-360 E. P. gasoline	13 -13¼	13 -13¼	13 -13¾
NORTH LOUISIANA			
58-60 U. S. Motor 437 E. P.	10 -10¼	10¼-10⅜	10 -10¼
ARKANSAS			
58-60 450 E. P. gasoline	-10	-10	9½-10
58-60 U. S. Motor gasoline	10 -10½	10¼-10½	10 -10¼
64-66 375 E. P. gasoline	12½-12¾	-12½	-12½
CALIFORNIA			
54-56 U. S. Motor gasoline	-11	-11	- 9
42-45 Engine distillate, 445-480 E.P.	8 - 9	8 - 9	8 - 9

Note: This is without the 2-cent state tax included in the price of California refiners for shipments within the state.

NEW ENGLAND (F. O. B. Boston and Fall River)			
U. S. Motor gasoline	-12⅜	-12½	12⅝-12¾

NATURAL GASOLINE

(Note: End point of all grades, not over 375 °F.)

OKLAHOMA			
Grade Double A	10 -10½	10½-10¾	10¾-10⅞
Grade A	10 -10½	10½-10¾	10¾-10⅞
Grade Double B	9 - 9¼	9¾-10	-10
Grade B	9 - 9¼	9¾-10	-10
Grade C	8½- 8¾	9¼- 9½	9¾- 9¾

NOTE—Specifications adopted by Ass'n of Nat. Gaso. Manufacturers
Grade Double A—80-87.9 gravity, 90% recovery, not over 375 E. P.
Grade A—72-79.9 gravity, 90% recovery, not over 375 E. P.
Grade Double B—84-92 gravity, 85% recovery, not over 375 E. P.
Grade B—76-83.9 gravity, 85% recovery, not over 375 E. P.
Grade C—80-90 gravity, 78% recovery, not over 375 E. P.

NORTH LOUISIANA			
Grade Double A	-10¾	-11	
Grade Double B	-10½	-10½	
Grade C	- 9¾	-10	
NORTH TEXAS			
*Grade Double A	9¾-10½	10½-10⅝	-10¾
*Grade A	9¾-10½	10½-10⅝	-10¾
*Grade Double B	9 - 9½	9¾-10	-10
*Grade B	9 - 9½	9¾-10	-10
*Grade C	8⅞- 9¼	- 9½	9½- 9¾

*F. O. B. Breckenridge.

CALIFORNIA			
78-84° 375 E. P.	15 -15½	15 -15½	15 -15½
PENNSYLVANIA			
68-70 Grav. 437 E. P.	13 -13½	13½-13¾	13½-13¾
64-66 Grav. 437 E. P.	13 -13½	13½-13¾	13½-13¾
60-62 Grav. 437 E. P.	12¾-13	12¾-13	12¾-13
68-70 Grav. 420 E. P.	14 -14½	14¾-14¾	14½-15

BURNING OILS

PENNSYLVANIA			
45 Water White Kerosene	7½- 7¾	7½- 7¾	7½- 7¾
46 Water White Kerosene	8¼- 8½	8¼- 8½	8¼- 8½
47 Water White Kerosene	- 9	- 9	- 9
300 Burning Oil	7¼- 8	7¼- 8	7⅛- 8
OKLAHOMA			
41-43 Water White Kerosene	5½- 5⅝	- 5½	5¼- 5⅜
42-44 Water White Kerosene	5¾- 6	5⅝- 5¾	5⅝- 5¾
KANSAS			
41-43 w. w. kerosene	5¾- 6	5¾- 6	5¼- 5¾
42-44 w. w. kerosene	6 - 6¼	6 - 6¼	6 - 6¼

NORTH TEXAS	Prices Jan. 18	Prices Jan. 11	Prices Jan. 4
41-43 Water White Kerosene	- 6	5¾- 6	- 5¾
42-44 Water White Kerosene	- 6¼	- 6	5¾- 6
NORTH LOUISIANA			
41-43 Water White Kerosene	6 - 6¼	5¾- 6	5¾- 6
ARKANSAS			
41-43 Water White Kerosene	6 - 6¼	- 6	- 6
CALIFORNIA			
40-42 Water White Kerosene	5 - 5½	5 - 5¼	5 - 5¼
NEW ENGLAND			
40-43 Water White Kerosene	.....	- 8½	- 8½

NEUTRAL OILS

PENNSYLVANIA (Viscosity at 70° F.)			
220 Vis. No. 3 Assoc. Filt	-28½	28½-29	-28
200 Vis. No. 3 Assoc. Filt	25½-26	25½-26	25 -25½
180 Vis. No. 3 Assoc. Filt	-23½	23½-24	23 -23½
150 Vis. No. 3 Assoc. Filt	-19½	19½-20	19 -20
(Non-Viscous)			
34 Grav. 350-360 Flash	8¼- 8½	8¼- 8½	8¼- 8½
36 Miners Neutrals 300-305 Flash	7½- 7¾	7½- 7¾	- 7¾
OKLAHOMA (Viscosity at 100°F.)			
100 Vis. No. 2 color	5½- 6	5 - 5½	5 - 5½
150 Vis. No. 3 color	9 -10	9 -10	9 -10
150 Vis. No. 4 color	- 8¾	- 8¾	- 8¾
180 Vis. No. 3 color	9¾-10½	9¾-10½	9¾-10½
180 Vis. No. 4 color	9½-10½	9½-10½	9½-10½
180 Vis. No. 5 color	- 9½	- 9½	- 9½
200 Vis. No. 3 color	10¾-11½	10¾-11½	10¾-11¾
200 Vis. No. 4 color	-10½	-10½	-10¾
200 Vis. No. 5 color	9½-10½	9½-10½	9½-10½
220 Vis. No. 3 color	-11¾	-11¾	-11¾
220 Vis. No. 4 color	12 -12¾	12 -12¾	12 -12¾
220 Vis. No. 5 color	-11¾	-11¾	-11¾
240 Vis. No. 3 color	-14	-14	-14
240 Vis. No. 4 color	-13½	-13½	-13½
240 Vis. No. 5 color	-13	-13	-13
280 Vis. No. 3 color	-16	-16	-16
280 Vis. No. 4 color	-15½	-15½	-15½
280 Vis. No. 5 color	-15	-15	-15
300 Vis. No. 5-6 color	17 -17½	17 -17½	17 -17½
GULF COASTAL (Viscosity at 100°F; cold test 0)			
100 Vis. No. 2 Color Unfilt. Pale	7½- 8	7½- 8	7½- 8
200 Vis. No. 3 Color Unfilt. Pale	12½-13	12½-13	12½-13
300 Vis. No. 3 Color Unfilt. Pale	14 -14½	14 -14½	14 -14½
500 Vis. No. 3½ Color Unfilt. Pale	16 -16½	16 -16½	16 -16½
750 Vis. No. 4 Color Unfilt. Pale	20½-21	20½-21	20½-21
200 Vis. No. 5½ Color Red Oil	10½-11	11 -11½	11 -11½
300 Vis. No. 5½ Color Red Oil	12 -12½	12½-13	12½-13
500 Vis. No. 6 Color Red Oil	13½-14	14 -14½	14 -14½
750 Vis. No. 6 Color Red Oil	18 -18½	18½-19	18½-19
CALIFORNIA (Viscosity at 100°F.)			
100 Vis. No. 2 color	13½-14½	13½-14½	13½-14½
100 Vis. No. 3 color	9 -10	9 -10	9 -10
200 Vis. No. 3 color	14½-15½	14½-15½	14½-15½
300 Vis. No. 3 color	14 -16	14 -16	14 -16
450 Vis. No. 3½ color	19½-20½	19½-20½	19½-20½
550 Vis. No. 3 color	21½-22½	21½-22½	21½-22½
600 Vis. No. 3½ color	23½-24½	23½-24½	23½-24½
100 Vis. No. 5 color	8 - 9	8 - 9	8 - 9
200 Vis. No. 5 color	13½-14½	13½-14½	13½-14½
300 Vis. No. 5 color	14 -15	14 -15	14 -15
400 Vis. No. 5 color	16 -17	16 -17	16 -17
500 Vis. No. 5 color	17 -18	17 -18	17 -18
600 Vis. No. 6 color	18 -19	18 -19	18 -19
700 Vis. No. 7 color	19½-20½	19½-20½	19½-20½

CYLINDER STOCKS

OKLAHOMA			
190-210 Vis. at 210° Bright Stock	30 -35	30 -35	30 -35
150-160 Vis. at 210° Bright Stock	27 -31	27 -31	27 -31
600 E Stock, 140-150 Vis. @ 210°	18 -20	18 -20	18 -20
600 Steam Refined Olive Green	8½-10	8½-10	8½-10
600 Steam Refined Dark Green	6 - 6¾	6 - 6¾	6 - 6¾
Black Oil	- 5	- 5	- 5
PENNSYLVANIA (1-inch Immersion Test)			
600 Steam Refined	18½-19	19 -19½	18 -18½
635 Steam Refined	21½-22	22 -22½	21½-22
650 Steam Refined	-24	24 -24½	24 -25
600 Flash	27 -27½	28 -28½	28 -28½
600 Warren E	-23	-23	22½-23
600 Oil City E	-22	-22	21½-22
600 Filtered D	-29	-29	-29
Cold Test Stocks (bright filtered)	-39	-39	-39
Cold Test Stock (dark filtered)	-37	-37	-37
Black Oil	8 - 8½	8 - 8½	- 8½

(Note—Prices of total immersion test goods average 1 to 3 cents per gallon higher.)

Above prices are f. o. b. refinery in tank car. They are the prices at which the bulk of the products on the open market move. Whoever has knowledge of any open market prices on any considerable quantity of goods differing from the foregoing, will favor us with this information.

Products that Satisfy

Satisfied Customers are the life of your business— ***and there is nothing that satisfies like real quality, at the right price.***

Humble Products "repeat" because their quality is right. Each one of them—and there is one for each lubrication need—has been carefully designed and prepared, and thoroughly tested to see that it meets the most rigid requirements.

Our line is complete, and our refinery facilities are such that we can take care of your needs at all times — making prompt shipments, in any quantity you may desire—a carload or a shipload—by rail or water, to any point on the globe.

Wire or write for samples and prices.

HUMBLE OIL & REFINING CO. — HUMBLE OILS — HOUSTON, TEXAS

Humble Oil & Refining Co.

Houston, Texas
"Zero Cold Test Oils"
Producers—Pipe Lines
Refiners — Marketers

"DEFIANCE"

REPUTATION

The co-operation of hundreds of people towards making a better barrel, has produced results. Results make reputation.

Reputation is not created in a year, although it may be lost in a day.

Only incessant vigilance and fixed integrity during the past years, have earned for Defiance Steel Barrels the reputation they enjoy among shippers of petroleum products.

THE AMERICAN STEEL PACKAGE CO.

Defiance, Ohio

Oil And Grease Formulas

200 formulas, modern in every particular, have been prepared in a simple, non-technical style by Forrest A. Hoff.

They are of value to the refiner, jobber, compounder, broker and lubricating engineer.

Just attach your check to this ad and return it to us now. $50 is the reasonable cost of all this valuable information. Synopsis sent upon request.

National Petroleum News

830 Caxton Building **Cleveland, Ohio**

Refinery Markets on Wax and Heavy Oil Products

Pennsylvania, Oklahoma, North and South Texas, Louisiana, Arkansas, California

WAX

PENNSYLVANIA	Prices Jan. 18	Prices Jan. 11	Prices Jan. 4
	(Per Pound New York)		
122-124 White Crude Scale..	- 5⅜	5¼- 5⅜	5¼- 5⅜
124-126 White Crude Scale..	- 5⅝	5⅜- 5⅝	5⅜- 5¾
OKLAHOMA			
	(Per Pound Group 3)		
124-126 White Crude Scale..	- 5	- 5	5 - 5¼
CALIFORNIA			
White Crude Scale.....	6 - 6½	6 - 6½	6 - 6½

FUEL OIL

PENNSYLVANIA			
38-40 Fuel Oil.....	6½- 6¾	6¼- 6¾	6¼- 6½
30-34 Fuel Oil.....	6 - 6¼	5¾- 6¼	5¾- 6
28-30 Fuel Oil.....	5¾- 6	5¾- 6	5¾- 6
OKLAHOMA			
38-40 Straw distillate.....	4 - 4¼	4 - 4¼	4 - 4¼
36-38 Straw distillate.....	3¾- 4	3¾- 4	3¾- 4
32-36 Gas oil.....	3½- 3¾	3½- 3¾	3½- 3¾
26-30 Fuel oil (Bbl.).....1.30 -1.35		1.30 -1.35	1.30 -1.35
22-26 Fuel oil (Bbl.).....1.25 -1.30		1.27½-1.30	1.27½-1.30
18-22 Fuel oil (Bbl.).....1.20 -1.25		1.22½-1.27½	1.22½-1.27½
KANSAS*			
38-40 Light straw distillate..	4¼- 4⅜	4¼- 4⅜	4¼- 4⅜
36-38 Light straw distillate..	4 - 4⅛	4 - 4¼	4 - 4⅛
32-36 gas oil.....	3¾- 4	3¾- 4	3¾- 4
26-30 Fuel oil.....1.35 -1.45		1.35 -1.45	1.45 -1.50
24-26 Fuel oil.....1.30 -1.35		1.30 -1.35	1.40 -1.45

*F. O. B. refinery, Kansas destination.

NORTH TEXAS	Prices Jan. 18	Prices Jan. 11	Prices Jan. 4
36-40 Straw Distillate.....	3¼- 3⅜	3¼- 3⅜	3¼- 3⅜
32-36 Gas Oil (Gal.).....	3½- 3⅝	3½- 3⅝	3½- 3¾
24-26 Fuel, per bbl.....1.30 -1.35		1.35-1.40	1.40 -1.50
GULF COASTAL			
Fuel.....1.55 -1.65		1.50 -1.55	1.50 -1.55
Gas Oil.....	- 5	- 5	- 5
NORTH LOUISIANA			
32-36 Light Gas Oil (Gal.)...	3¼- 4	3¼- 4	3¼- 4
18-22 Fuel Oil (Bbl).....1.10 -1.15		1.10-1.15	1.10 -1.15
ARKANSAS			
32-36 Gas Oil.....	3¼- 4	3¼- 4	3¼- 4
Smackover Crude Fuel.....1.00 -1.05		1.02½-1.05	1.02½-1.05
CALIFORNIA*			
14-18 Fuel Oil (Bbl.).....	1.00	1.00	1.00
14-18 Bunker Oil (Bbl.).....	1.00	1.00	1.00
24-30 Gas Oil (Bbl.).....	1.15	1.15	1.15
27 + Diesel Oil (Bbl.).....	1.15	1.15	1.15

*(San Joaquin Valley, San Francisco 4c per bbl. more.)

NEW ENGLAND (F. O. B. Boston and Fall River)			
30-32 gas oil (gal.).....	- 5½	- 5¼	- 5¼
Fuel Oil (Bunker C) bbl.....	-1.82½	-1.80	-1.72

Above prices are f. o. b. refinery in tank car. They are the prices at which the bulk of the products on the open market move. Whoever has knowledge of any open market prices on any considerable quantity of goods differing from the foregoing, will favor us with this information.

(Continued from page 113)

The "freeze-out" staged annually between the manufacturers and purchasers of natural gasoline, as a preliminary to the determination of a proper contract basis for the year, is in full swing. Several major contracts expired around Jan. 1 and have not been renewed. Contracts offered by manufacturers have been turned down by the refiners and contracts offered by refiners have been spurned by the sellers.

Purchasers could afford to be a bit arbitrary in the matter since their requirements are small at present. In several instances buyers are in a better position to hold off because they have increased their own production materially during 1925. The Carter Oil Co., subsidiary of the Standard Oil Co. of New Jersey, and the Sinclair Refining Co. are notable examples of organizations that have increased their production.

As a result of the sparring stocks of natural gasoline have been increasing and offerings for spot shipment have been made much more freely. Export demand in Texas has helped manufacturers there and Oklahoma prices are somewhat lower.

The situation is viewed in an optimistic light by the manufacturers. They are willing to wait until refinery demand picks up again before they make their new contracts. Their feeling is that natural gasoline markets will average well above U. S. Motor prices for the year although refiners claim they are learning how to produce an acceptable motor fuel with less natural gasoline and predict that the spread this year will be less than in 1925.

Kerosene Active

In Oklahoma 41-43 water white kerosene has stepped up above 5½ cents per gallon while in Texas refiners are selling at 5⅞ to 6 cents per gallon. The supply is not large in any part of the field although some refiners are increasing their production at the expense of home heating distillates. Kerosene is more plentiful at Kansas refineries than in any other part of the Mid-Continent.

With stove distillate production materially reduced refiners are moving out their reserves of this commodity and are rather active in seeking business. Demand is not extraordinary and prices have been only fairly well held.

Gas oil, however, has been in good demand at Oklahoma refineries. No outstanding large orders have been placed as far as can be ascertained but gas utilities and other consumers have provided a good volume of small orders. In Texas gas oil production is on the upgrade since fuel is weaker with the result that both commodities are easy.

Fuel Market Soft

The lack of heavy demand for fuel oil and the fact that stocks have not been cut into during the last few weeks is disturbing to the peace of mind of some of the refinery sales managers. A few experiments have been conducted to see whether a lower price would stimulate orders but these tactics have not been successful. The shading of quotations did not serve to bring in any more business.

In December it was predicted by a number of refiners that fuel oil would climb to a peak of $1.40 per barrel during the coldest part of the winter. At present there is a growing suspicion in the minds of some that the peak has been reached already.

All prices and market information printed herein have been gathered by the staff of National Petroleum News from reliable sources and so far as can be ascertained thoroughly represent the going market as defined for each product on the date given for those particular prices. Both buyers and sellers have been checked in the gathering of this information and actual sales studied.

These prices and this information are subject at all times to correction for errors. Anyone having knowledge of any facts which would indicate anything different from the information which is given, is especially urged to send in those facts to the head office of National Petroleum News at once, or take them up with the nearest representative. All such facts will be promptly and thoroughly investigated.

The staff of National Petroleum News is cognizant of the fact that this market information has come to have a high standing in the industry. It wants to not only maintain that standing, but to improve it and to that end, invites the co-operation of the entire oil industry.

Gasoline Price Trend is Down in Chicago

CHICAGO, Jan. 18.—Quiet has featured the oil market in Chicago this week. There have been no sharp changes. There have been no quick reactions or sudden flurries in business. Buying has been slow but consistent and prices have been unusually steady. In the last two days there was a slight downward slant in prices but it was noticed only in the tendency of a few dealers to shade the almost uniform quotations.

Conditions in the gasoline market have been quiet although influences have changed slightly. Official bulletins of the National Petroleum Marketers Association have advised jobbers to buy for immediate requirements only. Official bulletins of the American Oil Men's Association have advised jobbers to fill their storage now and benefit from the advance in prices, which is predicted. A slight shading in refinery prices was noticed on Friday and Saturday and rumors of crude advances have about died down.

Weather over the last week has continuously improved. Early in the week the temperature in Chicago and many other places in Standard Oil Co. of Indiana territory was below zero. Gradually the mercury rose until Friday and Saturday were mild—one might almost say "balmy." Moreover, the sky was bright and the snow that fell in the early days of the week is disappearing. Rather exceptional cold is predicted for the week ending Jan. 23, and about Wednesday snows are to be expected in the northern states and rains or snows south of the Ohio river, according to the weather bureau's weekly forecast.

The constant price on U. S. Motor gasoline this week in the Chicago resale market has been 10 cents a gallon, f.o.b. Group 3. On Saturday morning that price was being shaded here and there to 9⅞ cents a gallon. Export gasoline of 64-66 gravity, 375 end point was slightly easier toward the close of the week also at 12½ cents. The demand for burning oils is still slow but prices are holding rather firm at 5⅝ to 5¾ cents for 41-43 and 5¾ to 5⅞ cents for 42-44.

Distillate for domestic fuel, 38-40, is enjoying a fairly consistent but not a vigorous demand at 4 to 4¼ cents. Gas oil is steady at 3¾ to 3⅞ cents. Both of these products have held to their prices steadily over the week.

Fuel oils of lower gravities are weaker however. There has been an increasing amount of distress material in Chicago this week, offered at sacrifice prices. Oklahoma 18-22 continues to be quoted generally at $1.22½ to $1.25 a barrel but it has been shaded in a few instances to $1.20. The 22-26 grade is about the same price. Refinery 24-26 appears to be passing steadily out of the picture. It is held at $1.27½ to $1.30 a barrel but is scarce. Smackover remains consistently at $1.02½ to $1.05.

Crown Central Shipments

HOUSTON, Jan. 18.—M. C. Ehlen, vice president of the Crown Central Petroleum Corp., reports the following quantities of crude oil handled through the company's Houston ship channel terminal facilities in December:

For	Barrels
Beacon Oil Co.	297,818.09
Big Lake Oil Co.	93,228.64
Total	391,046.73

Phillips Orders 100 More Cars

TULSA, Jan. 18.—Phillips Petroleum Co. has ordered 100 insulated tank cars for natural gasoline service through the Tulsa offices of the Standard Tank Car Co., Sharon, Pa. The cars are of 8000 gallon capacity. Last July Phillips purchased 300 cars from the same company and now has 1250 Standard cars in its service.

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Week's Price Changes Tank Wagon Market

Gasoline Changes

Standard of Nebraska.—T.w. and s.s. reduced 1 cent, Omaha, to 17.25 cents and 19.25 cents respectively, **Jan. 13.**

Kerosene Changes

Magnolia Petroleum.—Reduced 2 cents, Fort Worth, to 10 cents, **Jan. 1.**

New Tankage at Sunburst

CASPER, WYO., Jan. 18.—To relieve the congestion now existing in the Sunburst field of northern Montana, which was responsible for the price reduction of 20 cents on Jan. 8, the Ohio Oil Co. is installing two 80,000-barrel tanks and the Illinois Pipe Line Co., principal carrier of oil, is putting in one 80,000 and one 37,500-barrel tanks. Production in this field has been increasing rapidly and facilities for handling the output have been taxed to capacity for some time.

Detroit Oil Club to Be Hosts

GRAND RAPIDS, MICH., Jan. 18.—A dinner and cabaret entertainment promises to be the feature of the social program at the annual convention of the Michigan Independent Oil Men's Association, which will be held at Hotel Statler, Detroit, on Jan. 21 and 22, according to James A. Gilmore, field secretary.

The dinner and accompanying entertainment specialties, which are scheduled for the evening of Jan. 22, will be furnished through the courtesy of the Detroit Petroleum Club, according to Frank McSweeney, secretary.

CHICAGO, Jan. 18.—George L. Bodie and H. H. Hoover, both formerly associated with the Fred G. Clark Co., have associated themselves together in a partnership to be known as the Bodie-Hoover Corp., with headquarters at 1101 West 37th street, Chicago. They have taken over the old plant of the Viscosity Oil Co., and will deal in lube oils, greases and soaps. After being vice president of the Fred G. Clark Co. for a number of years, Mr. Bodie was associated with the Cosden Sales Corp. Mr. Hoover was the Clark company's western sales manager with headquarters in Kansas City.

LAWRENCEVILLE, ILL.—The Indian Refining Co., Inc., put into effect on Jan. 1 a revised classification of accounts which is a result of several months' study and which will aid in the operating of the accounting department.

SHREVE, O.—Carl-Shelley Service Co. just celebrated its first year with a new station and equipment, according to E. S. Shelley, partner.

Tank Wagon, Service Station Markets for Gasoline and Kerosene In United States Territories and Canada

BELOW are given in cents a gallon, the tank wagon price of gasoline without the special taxes levied against motor fuels by many states, the amount of the state taxes, the total tank wagon price, with tax added in and the service station or retail price of gasoline as quoted by the Standard Oil Companies in their various marketing territories. The right hand column is the tank wagon price of kerosene. By tank wagon price is meant the price to resale agents or dealers.

These Prices in Effect January 18, 1926

S.O. NEW JERSEY TERRITORY

	Gasoline T.W.	Tax	Total	S.S.	Oil T.W.
Atlantic City, N. J.	15	0	15	*	14
Newark, N. J.	15	0	15	17	14
Annapolis, Md.	15	2	17	*	13.5
Baltimore, Md.	15	2	17	20	11
Cumberland, Md.	15	2	17	20	14
Washington, D. C.	15	2	17	20	13
Danville, Va.	15	3	18	*	14
Norfolk, Va.	15	3	18	21	14
Richmond, Va.	15	3	18	21	14
Roanoke, Va.	15	3	18	21	14
Petersburg, Va.	15	3	18	*	14
Williamsburg, Va.	15	3	18	*	14
Charleston, W.Va.	15	3½	18.5	21.5	14
Clarksburg, W.Va.	15	3½	18.5	21.5	14
Keyser, W.Va.	15	3½	18.5	*	14
Parkersburg, W.Va.	15	3½	18.5	21.5	14
Wheeling, W.Va.	15	3½	18.5	21.5	14
Charlotte, N. C.	15	4	19	22	14
Hickory, N. C.	15	4	19	*	14
High Point, N. C.	15	4	19	*	14
Mt. Airy, N. C.	15	4	19	*	14
Salisbury, N. C.	15	4	19	*	14
Charleston, S. C.	15	5	20	23	14
Columbia, S. C.	15	5	20	23	14

*Dealers set own prices. S.O. New Jersey does not operate station.

S. O. NEW YORK

*New York City	17	0	17	21	15
Albany, N. Y.	†17	0	†17	†19	15
Buffalo, N. Y.	15	0	15	18	15
Rochester, N. Y.	†16	0	†16	†20	15
Syracuse, N. Y.	17	0	17	19	14
Boston, Mass.	17	0	17	21	13
Augusta, Me.	17	3	20	23	15
Manchester, N. H.	17	2	19	23	15
Burlington, Vt.	19	2	21	24.5	15

*In steel barrels.

†At Rochester and Albany, Standard sells two grades of gasoline, the above price applying to its Socony grade, and another grade being sold 2c below this price.

ATLANTIC REFINING

Pittsburgh, Pa.	17	0	17	*22	14
Philadelphia, Pa.	17	0	17	*22	14
Allentown, Pa.	17	0	17	*22	14
Erie, Pa.	17	0	17	*22	14
Scranton, Pa.	17	0	17	*22	14
Altoona, Pa.	17	0	17	*22	14
Dover, Del.	17	2	19	22	14
Wilmington, Del.	17	2	19	22	14
Providence, R. I.	17	1	18	21	14
Springfield, Mass.	17	0	17	19	14.5
Worcester, Mass.	17	0	17	19	14.5
Hartford, Conn.	17	2	19	21	13.5
New Haven, Conn.	17	2	19	22	14
Boston, Mass.	17	0	17	20	14

*Contains 2-cent tax collected by retail dealer and paid by him directly to state.

S. O. KENTUCKY

Lexington, Ky.	15	3	18	21	15
Louisville, Ky.	17	3	20	23	13
Covington, Ky.	16	3	19	22	15
Clarksdale, Miss.	16	3	19	22	13
Jackson, Miss.	16	3	19	22	12
Natchez, Miss.	15.5	3	18.5	21.5	12.5
Vicksburg, Miss.	15.5	3	18.5	21.5	12.5
Birmingham, Ala.	17	2	19	22	15.5
Mobile, Ala.	16	2	18	21	13
Montgomery, Ala*	18	2	20	23	16.5
Atlanta, Ga.	†18	3½	22	25	16
Augusta, Ga.	†18	3½	22	25	15.5
Macon, Ga.	†18	3½	22	25	14.5
Savannah, Ga.	†14	3½	17	20	14
Jacksonville, Fla.	16	4	20	23	14
Miami, Fla.	18	4	22	25	15.5
Tampa, Fla.	16	4	20	23	14
Pensacola, Fla.	16	4	20	23	14.5

*Local privilege tax of 1 cent on gasoline and ½ cent on kerosene at Montgomery included.

†Georgia has ½ cent per gal. inspection fee on gasoline which is deducted as well as the state gasoline road tax of 3½ cents, to get the actual net tank wagon market to dealer.

S. O. INDIANA

	Gasoline T.W.	Tax	Total	S.S.	Oil T.W.
Chicago, Ill.	†16	0	†16	18	11
Decatur, Ill.	16.2	0	16.2	18.2	11.5
E. St. Louis, Ill.	15.1	0	15.1	17.35	10.6
Joliet, Ill.	16.4	0	16.4	18.4	11.7
Peoria, Ill.	10.5	0	10.5	12.5	11.5
Quincy, Ill.	16.2	0	16.2	18.2	11.3
Indianapolis, Ind.	16.2	3	19.2	21.2	11.7
Evansville, Ind.	16	3	19	21	11.5
South Bend, Ind.	16.4	3	19.4	21.4	11.9
Detroit, Mich.	16.8	2	18.8	20.8	12.2
Grand Rapids, Mich.	16.7	2	18.7	20.7	12.1
Saginaw, Mich.	16.9	2	18.9	20.9	12.3
Madison, Wis.	16.3	2	18.3	20.3	11.5
Milwaukee, Wis.	16.1	2	18.1	20.1	11.3
La Crosse, Wis.	17.2	2	19.2	21.2	12.4
Minneapolis, Minn.	15.2	2	17.2	19.2	12.6
Duluth, Minn.	15.5	2	17.5	19.5	12.6
Mankato, Minn.	17.1	2	19.1	21.1	12.4
Des Moines, Iowa.	16.5	2	18.5	20.5	11.9
Davenport, Iowa.	16.5	2	18.5	20.5	11.9
Sioux City, Iowa.	16	2	18	20	11.5
Mason City, Ia.	16.5	2	18.5	20.5	11.9
St. Louis, Mo.	**15.6	2	17.6	19.9	11
Kansas City, Mo.	††16.9	2	18.9	20.9	10.3
St. Joseph, Mo.	**16	2	18	20	10.9
Fargo, N. D.	18.9	1	19.9	21.9	14.6
Grand Forks, N.D.	19.2	1	20.2	22.2	14.9
Minot, N. D.	18.9	1	19.9	21.9	14.6
Pierre, S. D.	18	3	21	*	13.1
Huron, S. D.	14	3	17	19	13.1
Wichita, Kans.	15.8	2	17.8	19.8	10.8
Bartlesville, Okla.	13.9	3	16.9	18.9	9.9

†Dumps of 100 or more gallons at 15c per gallon.
*S. O. Indiana does not operate station.
**Includes city tax of ½c.
††Includes city tax of 1c.

S. O. NEBRASKA

Crawford, Neb.	17	2	19	*	12.25
Omaha, Neb.	15.25	2	17.25	19.25	11.5
McCook	17.75	2	19.75	21.75	13
Norfolk	16.75	2	18.75	20.75	12
North Platte	17.75	2	19.75	21.75	12.75
Scottsbluff	17.25	2	19.25	21.25	12.25

*Standard has no service station here.

CONTINENTAL OIL

Denver, Colo.	17	2	19	21	14.5
Pueblo, Colo.	17	2	19	21	14.5
Casper, Wyo.	17	2½	19.5	21.5	13
Cheyenne, Wyo.	18	2½	20.5	22.5	14.5
Butte, Mont.	19	2	21	21	16
Helena, Mont.	21	2	23	25	17
Salt Lake City, Utah.	19.5	3½	23	25	18
Boise, Ida.	21	3	24	26	20
Albuquerque, N.M.	20.5	3	23.5	26.5	16.5

S. O. CALIFORNIA

Phoenix, Ariz.	20	3	23	26	21.5
Los Angeles, Cal.	10.5	2	12.5	18.5	15.5
Fresno, Cal.	14.5	2	16.5	20.5	17.5
San Francisco, Cal.	14	2	16	20	15.5
Reno, Nev.	17.5	4	21.5	25.5	19
Portland, Ore.	14	3	17	21	16.5
Seattle, Wash.	14	2	16	20	16.5
Spokane, Wash.	18	2	20	24	20.5
Tacoma, Wash.	14	2	16	20	16.5

S. O. LOUISIANA

Little Rock, Ark.	14	4	18	21	13.5
Alexandria, La.	14	2	16	19	13.5
Baton Rouge, La.	13	2	15	18	12
Lake Charles, La.	14.5	2	16.5	19.5	13.5
New Orleans, La.	*14.5	2	16.5	19.5	12.5
Shreveport, La.	13	2	15	18	12.5
Lafayette, La.	14	2	16	19	13
Bristol, Tenn.	15.5	3	18.5	21.5	15
Chattanooga, Tenn.	14	3	17	20	15
Knoxville, Tenn.	15	3	18	21	15.5
Nashville, Tenn.	14	3	17	20	15
Memphis, Tenn.	13.5	3	16.5	19.5	14.5

*Includes 1c city tax on gasoline and kerosene.

S. O. OHIO

	Gasoline T.W.	Tax	Total	S.S.	Oil T.W.
All Ohio points	18	2	20	22	14

MAGNOLIA PETROLEUM

Muskogee, Okla.	16	3	19	22	9
Oklahoma City	16	3	19	22	12
Tulsa, Okla.	14	3	17	20	12
Fort Smith, Ark.	14	4	18	21	13.5
Little Rock, Ark.	14	4	18	21	13.5
Texarkana, Ark*	16	4	20	23	12.5
Dallas, Tex.	14	1	15	19	12
El Paso, Tex.	17	1	18	19	13
Fort Worth, Tex.	13	1	14	16	10
Houston, Tex.	16	1	17	19	12
San Antonio, Tex.	12	1	13	15	10

*Within city of Texarkana, Ark., the state tax on gasoline is 1c per gal. conforming with the Texas state tax. In Texarkana district outside of the city the 4c state tax applies.

V. M. & P. NAPHTHA

Changes ordinarily occur coincident with gasoline)

	Oleum Spirits	V.M.&P. Naphtha	Cleaners Naphtha
Chicago	18	20	20
Detroit	19.2	21.7	21.7
Kansas City	18.2	20.2	20.2
Milwaukee	18.2	22.7*	22.7*
Minneapolis	19.5	24*	24*
St. Louis	17.4	19.9	21.2
New York		17	....

*Including state tax.

CANADA

(Per Imperial Gallon, which is 1.2 American Gallons)

	Gasoline T.W.	Tax	Total	S.S.	Oil T.W.
ONTARIO					
Toronto	23.5	3	26.5	30	20
Ottawa	24.5	3	27.5	31	21
Cochrane	28.5	3	31.5	35	24.5
Ft. William	27.5	3	30.5	34	22.5
MANITOBA					
Winnipeg	27.5	3	30.5	34	22.5
SASKATCHEWAN					
Regina	30.5	0	30.5	34	25.5
ALBERTA					
Edmonton	31.5	2	33.5	37	27.5
Calgary	29.5	2	31.5	35	25.5
BRITISH COLUMBIA					
Vancouver	21	3	24	28	23
QUEBEC					
Montreal	23.5	3	26.5	30	20
Quebec City	25.5	3	28.5	32	22
Three Rivers	25.5	3	28.5	32	22
NEW BRUNSWICK					
St. John	26.5	0	26.5	31	25
Moncton	26.5	0	26.5	31	25
NOVA SCOTIA					
Halifax	26.5	3	29.5	33	23
Sydney	28.5	3	31.5	32	25
PRINCE EDWARD ISLAND					
Charlottetown	26.5	2	28.5	33	23

Note: In districts surrounding these points 1c additional is added to city price.

Complete Export Markets

New York **Gulf Coast** **California**

Foreign Interest is Increasing; Gasoline is Strengthening

By Special Correspondent
NEW YORK, Jan. 18

FOREIGN buying interest was appreciably keener last week. Inquiries are coming into the market for February-forward shipments for the spring trade abroad, and gasoline is strengthening in the Gulf region. Bunker oil also was firmer, with nothing available for bunkering purposes below $1.60 a barrel, while cargoes are quoted at $1.55 although $1.50 can be done in one direction.

Along the Atlantic Seaboard, gasoline showed a slightly firmer tendency, but kerosene is easier, while the waxes are dull and weak. Pennsylvania cylinder stocks are in growing demand on a basis of 26 cents for 600 steam refined cylinder oil.

Gasoline—New York

A leading Philadelphia refiner is reported to have sold a cargo of U. S. Motor and 64 gravity gasoline along with prime and water white kerosene involving 40,000 barrels, for January shipment to France but details were withheld. There was an inquiry for 45,000 barrels of U. S. Motor, 64-66 gravity gasoline, and prime and water white kerosene for nearby shipment to the continent and two of the big Independents are working on this. Most New York refiners are asking 11¼ to 11½ cents a gallon for U. S Motor gasoline at the refineries. Rumors of offerings at 11 cents were unconfirmed.

Cased gasoline was quiet at unchanged prices. One of the large Independents sold 15,000 cases for nearby shipment to the Near East while another booked an order for 20,000 cases for February shipment to the Orient.

Gasoline—Gulf Ports

One of the leading Independents sold a cargo of 40,000 barrels of U. S. Motor and 64 gravity gasoline for shipment to France in the next 30 days at 11 cents for U. S. Motor and 14¼ cents for the 64 gravity. Later in the week this seller advanced U. S. Motor to 12 cents and 64 gravity gasoline to 14¾ cents, while other exporters were quoting 11½ and 14½ cents, respectively. Another large independent sold two cargoes, 40,000 barrels each, of U. S. Motor, 64-66 gravity, and prime and water white kerosene for January-February shipment to the continent but details were withheld.

U. S. Motor in tank cars at the refinery, to the domestic trade, was held at 11¼ cents a gallon by leading Independents. Demand from the jobbing trade in the vicinity of New Orleans was reported more spirited.

Cased gasoline was quiet. One of the large Independents is working on an order for 45,000 cases for February shipment to Australasia.

Gasoline—Domestic

At New York harbor refineries U. S. Motor was held at from 11¼ to 11½ cents a gallon, while in tank cars delivered to the jobbing trade refiners were asking from 12¼ to 12¾ cents a gallon. This market is still rather easy regardless of the advance in Gulf prices. Jobbing demand lags and buyers are looking for lower prices. There has been some talk of an impending advance in tank wagon prices, regardless of the weakness in bulk gasoline, but no changes were announced.

Kerosene—New York

Export demand for kerosene has been slightly better but the tendency was easier last week, owing to the waning domestic demand. At New York harbor refineries water white was offered at 8 to 8¼ cents a gallon. Cased kerosene is moving in a larger way. One Independent reported the sale of 35,000 cases for February shipment to South American ports, but the price was not divulged. There is a heavy contract movement. Shipments to the West Coast of Africa are increasing.

Several mixed cargoes of gasoline and kerosene were sold as noted above, and stocks have been somewhat reduced. However, while one of the leading refiners has advanced bulk water white to 8½ cents and prime to 7½ cents, others were offering freely at ½ cent a gallon below these prices. Cased kerosene is in better demand and water white is still held at $1.70 in cargo lots while prime is unchanged at $1.60. A Chinese buyer is reported to have purchased 40,000 cases of prime and water white for February shipment.

Kerosene—Domestic

Jobbing demand for kerosene is not up to expectations. Buyers are inquiring more actively and water white in tank cars delivered to the trade is held at 9¼ to 9¾ cents a gallon. Stocks are large and refiners appear more inclined to press sales. Advances announced by some refiners in the Gulf region have failed to improve local conditions. The tank wagon price at New York, however, is firm at 15 cents a gallon.

Waxes—New York

White crude scale wax was virtually neglected throughout the week. No export sales were disclosed and domestic buying has been almost entirely hand-to-mouth. For white crude scale 122-124 A.m.p. the asking price is still 5¼ cents a pound while 124-126 A.m.p. is held at 5½ cents. There were persistent rumors current that on a firm bid 122-124 could have been had at 5⅛ cents but no offerings were reported at this figure. Exporters report cabling to continental buyers without receiving replies.

Fully refined waxes were equally dull and 120-122 A.m.p. was still held at 6 cents while 125-127 A.m.p. was quoted at 6⅛ cents. For 128-130 A.m.p. the asking price was 6¼ cents a pound while 130-133 was quoted at 6½ cents. Semi-refined was easy at 5¾ cents. Yellow scale held at 5⅛ to 5¼ cents.

Waxes—New Orleans

Conditions in the Gulf wax market were much the same as those existing in New York. Export buyers are disinterested and numerous cables to the other side have failed to stimulate demand. Domestic consumption is fair but buying is almost entirely hand-to-mouth. For white crude scale 124-126 A.m.p. the asking price is 5¼ cents a pound while semi-refined 124-126 is held at 5⅜ cents. Fully refined waxes are dull and unchanged, and 125-127 A.m.p. is still held at 6 cents a pound while 133-135 A.m.p. is offered freely at 6½ cents.

Bunker Oil—New York

Grade C is strong with all big refiners now asking $1.75 a barrel f.o.b. refinery and $1.81½ f.a.s., New York harbor. Demand is not active but the advance in the Gulf market has improved sentiment considerably and refiners are offering more sparingly. Diesel oil is dull but firmly maintained at $2.20 a barrel,

refinery. Deliveries in both oils were mainly against contracts.

Bunker Oil—New Orleans

The inside price quoted on bunker oil for bunkering purposes f.o.b. Gulf ports was advanced 10 cents a barrel to $1.60 a barrel. In cargo lots, it was intimated that on a firm bid $1.50 can be done. Demand for bunker oil has improved and many of the leading suppliers report difficulty in meeting contracts. Mexican crude oil is on the upward swing and heavy Panuco crude is now quoted at $1.16 a barrel, f.o.b. Tampico, taxes to be added, while the asking price for grade C bunker oil remains unchanged at $1.45 a barrel at Tampico.

Gas Oil—New York

There was a much improved demand for gasoline but almost all of the orders were from domestic buyers. Export demand is lagging. The 36-40 grade is firm at 5½ cents a gallon at the refineries while 28-34 is held at 5¼ cents a gallon, refineries. Stocks on hand are somewhat lighter than a week ago and refiners are more confident of the future. There were two inquiries from abroad, one from Scandinavia for 25,000 barrels for February shipment, and another from the United Kingdom for 35,000 barrels. Neither of these materialized.

Gas Oil—Gulf Ports

The gas oil situation was much the same as a week ago. Galician gas oil is still underselling American, and while occasonal foreign inquires or "feelers" are received, no bulk sales were reported. Leading refiners are more confident of the future and are reported to be planning to crack greater quantities for gasoline. There is little or no pressure to sell despite the slump in export demand, and 32 plus dark oil is still held at 4½ cents a gallon, while light 26-28 is held at 4¾ cents a gallon.

Lubricants—New York

There was a more active demand for Pennsylvania cylinder stocks, and prices were firm on a basis of 26 cents a gallon for 600 steam refined, in barrels, New York. Demand from France is improving. One of the smaller Independents reported the sale of two lots, one calling for 500 barrels of cylinder oils and the other 1000 barrels of assorted lubricants. Neutral oils are in growing demand. Stocks abroad are apparently low.

Lubricants—Gulf Ports

Leading refiners reported a more active demand for zero cold test oils, for immediate shipment to France. A report was current that one of the big exporters had sold a cargo of 35,000 barrels of assorted lubricants for January-February shipment to the continent. Prices, however, did not show any commentable changes, although buyers say refiners are quoting considerably above what they are willing to sell at.

Medicinal Oils

Demand for medicinal oils is lagging but prices are steady and unchanged. There is a more active inquiry for petrolatums and snow white is firm at 11¼ cents a pound. Lily white is in growing demand.

New York Export Market

Prices below are an index to the export markets as of the dates given. In many cases they are actual sales prices. So many factors enter into the price in export transactions that an actual market price governing the bulk of transactions cannot be given.

GASOLINE	Jan. 18	Jan. 11
U. S. Motor, Tank cars Ref.	11¼	-11¼
U. S. Motor cases,	27.15	-27.15
KEROSENE		
41-43-150 W. W. Tank cars Ref.	08¼	-08¼
41-43-150 W. W. Cases	19.40	-19.40
42-44-110 S. W. Cases	17.90	-17.90
GAS OIL		
36-40, Bulk Refinery	05½-06¾	05½-06¾
28-34, Bulk Ref.	05¼-06¾	05¼-06¾
MEXICAN BUNKER OIL		
Grade C, f. o. b- ref., Bulk	1.75	-1.75
Diesel Oil f. o. b. ref., Bulk	2.20	-2.20

LUBRICATING OILS

The following prices are cooperage basis f. o. b. New York, products being manufactured by inland refineries.

CYLINDER OILS (bbls.) 1 inch Immersion Test; All Penna. Products	
Filtered D 600	-32
Filtered E 600	-30
Unfiltered 600 s. r.	-26½
Unfiltered 650 s. r.	-31½
600 flash s. r.	-34
630 Flash	-42
RED PARAFFIN (bbls.) (Viscosity at 70)	
300 vis. No. 5 color	-21¾
250 vis. No. 5 color	-20¾
High Viscosity No. 5 color 26	-26

Neutral Oils (bbls.) (Viscosity at 70)		
200 vis. at F. Pale No. 3 color	-31¾	-31¾
180 Pale No. 3 color	-29¾	-29¾
150 Pale No. 3 color	-24¾	-24¾

BLACK OIL (bbls.)				
25-30 cold test	14	-15	14	-15
15 cold test	15	-15¾	15	-15¾

MEDICINAL OILS
(Includes Price of Drums)
(Penna. Stocks)

	Jan. 18	Jan. 11
Domestic.875-.885s.g.	1.00-1.08	1.00-1.08
Domestic.865-.870s.g.	.75- .80	.75- .80
Russian.885-.890s.g.325-330 vis.	1.20-1.25	1.20-1.25

WAXES
(Penna. Stocks)
(F. A. S. Carload Lots)

WHITE CRUDE SCALE		
122-124 A. m. p.	-05¼	-05¼
124-126 A. m.p.	-05¼	-05¾
MATCH		
105-108 A. m. p.	-06	-06
FULLY REFINED		
120-122 A. m. p.	06	-06
123-125 A. m. p. Philadelphia	06⅛	-06⅛
125-127 A. m. p.	06⅜	-06⅜
128-130 A. m. p.	06⅜	-06⅜
130-132 A. m. p.	06⅜	-06⅜
133-135 A. m. p.	06¾	-06¾
135-137 A. m. p.	-07¼	-07¼
SEMI REFINED		
122-124 A. m. p.	-05½	05½
YELLOW CRUDE SCALE		
124-126 A. m. p.	05½	-05½

PETROLATUMS
(Penna. Stocks)
Per Pound

Dark Green	02¾	02¾
Veterinary	03¼	03¼
Light Amber	03¼	03¼
Dark Amber	03¾	03¾
Cream	06¾	06¾
Lily White	08¼	08¼
Snow White	11	11

Gulf Export Market

Gasoline
F. O. B. Seaboard
Shipments of 20,000 Bbls. and over

	Jan. 18	Jan. 11
U. S. Motor, Cargo	.11½	-.11½
60-62 400 c. p. Bulk	.13	.13½
64-66, 385 c. p. Bulk	.14¼-.15	.14¼-.14½
U. S. Motor, Cases (cargo lots)	2.30	2.30
64-66, Cases (cargo lots)	2.60	2.65
KEROSENE		
Water White, 41-43 bulk	08-08¼ .08	-08¼
Prime White, 42-44 bulk	07-07¼ .07	-07¼
Water White, cases (cargo lots)	1.70	-1.70
Prime White, cases (cargo lots)	1.60	-1.60
DOMESTIC GAS AND BUNKER OIL		
26-28, gravity, bulk*	04¾	-04¾
32 plus, bulk, Dark	04½	-04½
Grade C, Bunker oil	1.60	1.50-1.60
Cargoes	1.50	1.45

*Transparent through neck of a 4 oz. bottle.

MEXICAN CRUDE AND BUNKER OILS
F. O. B. Steamer Tampico

Heavy, Taxes to be added	1.16	-1.12
Grade C, Bunker oil Taxes paid	1.40	1.40
Grade C, Bunker oil F. A. S. New Orleans	1.60	1.50

Lubricating Oils
SOUTH TEXAS
(Viscosity at 100°F; cold test 0)
(Tanker, F. O. B. Houston)

	Jan. 18	Jan. 11
100 Vis. No. 2 Unfiltered Pale	07	07
150 Vis. No. 2½ Unfiltered Pale	09	09
200 Vis. No. 3 Unfiltered Pale	11	11
300 Vis. No. 3 Unfiltered Pale	12	12
500 Vis. No. 3½ Unfiltered Pale	14	14
200 Vis. No. 5½ Red Oil	10½	10½
300 Vis. No. 5½ Red Oil	11½	11½
500 Vis. No. 6 Red Oil	13	13
800 Vis. No. 6 Red Oil	18	18

Pacific Export Market

Cargo lots quotations at seaboard, Los Angeles)

	Jan. 18	Jan. 11
Gasoline, U. S. Motor—54°—56°	8 -10	8 -10
Gasoline—U. S. Motor blends and special cuts	9 -10½	9 -10½
Gas Oil, 24°—30°B. per bbl.	$1.15	$1.15
Diesel Oil, 27°B—plus per bbl.	$1.15	$1.15
Bunker Oil, 14°—18°B. per bbl.	$1.00	$1.00
Fuel Oil, 14°—18°B. per bbl.	$1.00	$1.00
Kerosene, W. W. 40°—42° B per gal., 125-150 flash test	.05 -05½	05 -05½
Cased Goods		
Gasoline, U. S. Motor	$2.35	$2.35
Kerosene, W. W. 40°—42° B per case, flash test 125-150	$1.40-1.50	$1.40-1.50

N. Y. Domestic Market

The following light oil, gas and fuel oil prices are F. O. B. New York refineries, being products made from Domestic (including California) and Mexican Crudes.

	Jan. 18	Jan. 11
U. S. Motor Gasoline, Tank Cars Delivered greater N.Y.	-12½	-12½
U. S. Motor Gasoline, Tank Cars Bayonne	-11¼	-11¼
Kerosene, 41-43 150 W. W. Tank Cars Del'd greater N.Y.	-09¼	-.09¼
Grade C Bunker f.o.b. N.Y. Ref.	1.75	1.75
Diesel Oil f.o.b. Refinery	2.20	2.20
Gas Oil, 36-40, Bulk Refinery	-05½	05½-06
Gas Oil, 28-34 Bulk, Refinery	-05¼	05¼-05¾

Gasoline Taxed 6 Cents At Eufala, Ala.

CLEVELAND, Jan. 18.—Southern states were pioneers in levying gallonage taxes on gasoline. State tax on gasoline in South Carolina is the highest in the country—5 cents per gallon. Florida and North Carolina are second with 4 cents and Georgia has a 3½ cent tax.

Alabama has only a 2-cent tax but counties and municipalities are permitted to levy taxes on gasoline and this opportunity is passed up by few officials. The worst case in Alabama is at Eufala where three taxes of 2 cents each are levied, one by the state, one by the county and one by the city, making a total of 6 cents.

There is agitation in Alabama for the state to issue road bonds, increase the state tax on gasoline, and end the county and city nuisances. Politics are said to guide the Alabama road program so whatever is done the motorist will probably be squeezed a little more and may not benefit so much as he should even though he will have to pay the bill, several oil men predicted.

British Importations

During the week ended Dec. 18 38,755,160 imperial gallons of petroleum were imported into the United Kingdom. Larger receipts were :

Consignee	Imperial Gallons	Product	Port of Origin
London—			
Worthington & Boler	245,000	Lubes	Houston
Shell	1,636,515	Crude	Curacao
Shell	413,741	Fuel Oil	Beaumont
Shell	281,761	Gasoline	Constantza
Shell	2,237,362	Crude	Curacao
Shell	914,284	Fuel Oil	Curacao
Anglo-Mex	2,206,260	Gasoline	Martinez
Russian Oil	1,202,781	Gasoline	Batown
Anglo-Amer	1,587,890	Gas Oil	Atreco
Liverpool—			
Brit.-Mex	1,888,000	Fuel Oil	S. Pedro
Shell-Mex	527,059	Gas Oil	Phila.
Worthington & Boler	263,324	Lubes	Houston
Anglo-Mex	762,500	Gasoline	S. Pedro
Anglo-Amer	323,212	Lubes	New York
Anglo-Amer	153,724	Kerosene	New York
Hull—			
Spear, Houffe & Co	202,099	Kerosene	Constantza
Manchester—			
Anglo-Amer	928,960	Kerosene	Atreco
Anglo-Amer	2,458,900	Kerosene	New York
Brit.-Mex	1,876,000	Gasoline	S. Pedro
Anglo-Mex	426,000	Kerosene	Tampico
Anglo-Mex	1,438,200	Gasoline	S. Pedro
Shell-Mex	1,627,482	Benzine	Constantza
Shell-Mex	289,230	Benzine	Constantza
Preston—			
Russian Oil Products	600,731	Gasoline	Novoross'k
Southampton—			
Brit.-Mex	2,057,157	Crude	Aruba Isles
Swansea—			
Nat'l Oil Ref	2,435,350	Crude dist	Abadan
Nat'l Oil Ref	2,752,940	Crude	Abadan
Nat'l Oil Ref	1,555,240	Crude dist	Abadan
Aberdeen—			
Shell-Mex	597,080	Fuel Oil	Tampico
Glasgow			
British Mex	1,920,000	Fuel Oil	Batown
Grangemouth—			
Scottish Oils	2,295,000	Crude	Abadan

Crude Oil Prices All Fields

ALL PRICES EFFECTIVE, *JAN. 18*

EASTERN FIELDS
Posted by Joseph Seep Purchasing Agency

Penna. Grade Oil in New York Transit Lines (Alleghany, N. Y. District)	$3.65	Gaines, Tioga Co. (Pa.)	$2.95
Bradford District Oil in National Transit Lines (Bradford District)	3.65	Cabell Grade in Eureka Pipe Lines (West Virginia)	2.10
Penna. Grade Oil in National Transit Lines (Other Pennsylvania)	3.55	Corning Grade in Buckeye Pipe Lines (Ohio)	1.95
Penna. Grade Oil in Southwest Penna. Pipe Lines (Other Pennsylvania)	3.55	*Somerset Medium in Cumberland Pipe Lines (Kentucky)	2.20
Penna. Grade Oil in Eureka Pipe Lines (West Virginia)	3.50	*Somerset Light in Cumberland Pipe Lines (Kentucky)	2.35
Penna. Grade Oil in Buckeye Pipe Lines (Ohio)	3.30	Ragland Grade in Cumberland Pipe Lines (Kentucky)	1.15

*Somerset oil run prior to Oct. 1, 1923, takes price of 6 cents lower than above quotations.

CENTRAL STATES FIELDS
Posted by Ohio Oil Co.

Wooster	$2.00	Indiana	$1.78	Plymouth	$1.40
Lima	1.98	Princeton	1.87	*Canadian Petrolia	2.38
		Illinois	1.87	*Posted by Imperial Oil, Ltd.	

OKLAHOMA, KANSAS And NORTH TEXAS FIELDS
(Prices of Prairie Oil & Gas Co.)
(Prairie's prices apply in Oklahoma, Kansas, North and Central Texas.)

*28-28.9	$1.15	37-37.9	$1.87
29-29.9	1.23	38-38.9	1.95
30-30.9	1.31	39-39.9	2.03
31-31.9	1.39	40-40.9	2.11
32-32.9	1.47	41-41.9	2.19
33-33.9	1.55	42-42.9	2.27
34-34.9	1.63	43-43.9	2.35
35-35.9	1.71	44 and above	2.43
36-36.9	1.79		

*Effective Nov. 1, Prairie announced to its present customers that it would deduct 8c per barrel for every degree below 28 gravity on Mid-Continent and North Texas crude. It will pay $1.07 for 27-27.9, 99c for 26-26.9, etc. New quotations are not added to present schedule inasmuch as Prairie is not in the market for new connections on this low gravity crude.

Humble Oil & Refining Co. Prices

(Ranger, North Texas, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie and Moran crudes all in Texas.)

Effective Nov. 21, Humble posted same gravity and price schedule as that maintained by Prairie excepting that Humble is paying $1.07 for all oil below 28 gravity.

Magnolia Petroleum Co. Prices
In Oklahoma, Kansas and North Texas

Effective Nov. 23, Magnolia posted same gravity and price schedule as Humble, in all fields where it purchases on a gravity basis.

Effective Nov. 23, Corsicana heavy was advanced to $1.05.

NORTH LOUISIANA—ARKANSAS FIELDS
***Prices of the Standard Oil Co. of Louisiana**

Caddo, below 32	$1.65	Haynesville, below 33	$1.55	Smackover, 24-24.9	$1.15
do 32-34.9	1.75	do 33 and above	1.65	do 25-25.9	1.20
do 35-37.9	1.85	El Dorado, below 33	1.55	do 26-26.9	1.25
do 38 and above	1.95	do 33 and above	1.65	do 27 and above	1.30
Homer, below 31	1.40	Bull Bayou, 32-34.9	1.45	De Soto	1.80
do 31-32.9	1.55	do 35-37.9	1.60	Crichton	1.60
do 33-34.9	1.65	do 38 and above	1.75	Bellevue	1.65
do 35 and above	1.75	Smackover, below 24	.85	Cotton Valley	1.10

*Same prices maintained by The Texas Co. and Gulf Production Co. The Texas Co. buys in Caddo, Bull Bayou, De Soto, Crichton and Smackover fields.

STEPHENS, ARKANSAS
Posted by Louisiana Oil Refining Corp., and Atlantic Oil Producing Co.

26 and above	$1.40	Below 26	$1.20

SMACKOVER, ARKANSAS
Prices of Louisiana Oil Refining Corp.

Below 24	$0.85	25-25.9	$1.25	27 and above	$1.35
24-24.9	1.15	26-26.9	1.30		

SMACKOVER, ARKANSAS
Prices of Atlantic Oil Producing Co. and Shreveport-Eldorado Pipe Line Co.

Below 24	$0.90	25-25.9	$1.25	27 and above	$1.35
24-24.9	1.15	26-26.9	1.30		

GULF COASTAL FIELDS
(Posted by Humble Oil & Refining Co., The Texas Co., Gulf Production Co., Sun Oil Co. and Sinclair Crude Oil Purchasing Co.)

Grades A	$1.50	Grades B	$1.25

Goose Creek, Hull, Orange and Pierce Junction are the only Gulf Coastal fields that have A and B grade classifications. All other fields are classified as A grades only.

ROCKY MOUNTAIN FIELDS
Prices of Ohio Oil Co. and Midwest Refining Co.

†Salt Creek 29-29.9	$1.23	36-36.9	$1.79	Rock Creek	$1.75
30-30.9	1.31	37 and above	1.87	†Osage	1.90
31-31.9	1.39	Elk Basin	1.90	†Cat Creek, Mont	1.90
32-32.9	1.47	Grass Creek light	1.90	Sunburst, Mont	1.15
33-33.9	1.55	Big Muddy	1.75	†Hogback, N. Mex	1.95
34-34.9	1.63	Lance Creek	1.90	Artesia, N. Mex	1.45
35-35.9	1.71				

†Posted by Midwest Refining Co. Midwest also buys Grass Creek light, and Elk Basin. The Texas Co. buys Salt Creek crude.

CALIFORNIA
Prices of Standard Oil Co of California

Standard Oil Co. of California on Sept. 22 reduced California crude from 10 to 35 cents per barrel and posted 19 new price classifications in the various fields. Instead of paying the same price for the same gravity of oil in all fields regardless of the value of the oil, as it previously has done, the Standard put into effect a new schedule which provides a different schedule of prices for each field and takes into account the varying values of oils of the same gravity in the different fields.

On Oct. 27, it further reduced heavy oils in amounts ranging up to 15 cents. New base price for heavy oils in the San Joaquin Valley is 75 cents, in Southern California fields, 85 cents, and in the Rosecrans-Dominguez, Santa Maria and Ventura county fields, it is $1 per barrel for 14 to 14.9 gravity. Light oils remain unchanged.

The new complete schedule of prices in California can be obtained from the editorial department of National Petroleum News on application.

REFINERS' and COMPOUNDERS' SUPPLIES

Following are the average market prices for the week on materials used by refiners and compounders f. o. b. shipping point as effective this date.

Refiners' Supplies

	Jan. 18	Jan. 11
Soda Ash light 58% bags cwt.	-$1.38	-$1.38
Silicate of Soda 60 deg. drums.....cwt.	- 1.70	- 1.70
Sal Soda wks.....cwt.	1.10- 1.25	1.10- 1.25
Caustic Soda 70% solid..cwt.	- 3.10	- 3.10
Chloride of Lime.....cwt. works.....	-2.00	- 2.00
Sulphuric Acid 60 deg. tank cars f. o. b. shipping point.....per ton	-10.00	-10.00

Compounders' Supplies (Open Market)

Vegetable Oils—

Linseed carloads spot.....lb.	11.8	11.9
February.....	11.8	11.9
Tanks, spot.....	11	11.1
Boiled carloads spot.....lb.	11.9	12
*Soya Bean spot, Bbls....lb.	13½	13½

Animal Oils—

English Degras.....lb.	.05½	-.05½
Domestic Degras, bbls., carloads.....lb.	-.04¾	-.04¾
*Horse.....lb.	-.10	-.10

Oleic Acid—

Dist. Bbls.....lb.	.11 -.11½	.11 -.11½
Saponified Bbls.....lb.	.11¼-.11¾	.11¼-.11¾

Castor Oil—

No. 3 Carlots, Bbls.....	-.14	-.14¼
No. 1 Carlots, Bbls.....	-.14½	-.14¾

Lard Oils—

Prime Winter Strained. to 1½ffa.40‡45c.t.lb.	.18¼	.17¾
Extra Winter Strained. 2 to 4½ffa.40/45c.t.lb.	.14¾	.14¾
Extra..... 4 to 5 ffa.40/45c.t.lb.	.14¼	.14¼
Extra No. 1 7 to 10 ffa.40/50c.t.lb.	.13¼	.13¼
No. 1.....15 to 18 ffa.40/45c.t.lb.	.13	.13
No. 2.....22 to 25 ffa.40/45c.t.lb.	.12¾	.12¾
Prime Edible Tallow under 1¾ffa. 40/45c.t.N.Y.....lb.	-.11¼	-.11¼
Tallow acidless.....lb.	-.13	-.13
Lard Stearine.....lb.	-.18¼	-.18¼
Oleo Stearine.....lb.	-.12½	-.12¾

Neatsfoot Oil—

Pure.....bbls.-lb.	.16¼	.16¼
Extra.....do lb.	.13¼	.13¼

No. 1.....bbls.-lb.	.13	.13
Cold pressed.....lb.	.19¼	.19¼

Fish Oils—

Menhaden Oil Light pressed.....gal.	-.70	-.70
White.....gal.	-.75	-.75
Yellow bleached.....gal.	-.75	-.75
*Herring tank cars coast.....gal.	-.50	-.50
Whale, extra winter bleached.....gal.	-.82	-.82
Seal.....gal.		Nominal

Naval Stores—

Turpentine, N. Y.....gal.	1.10½	1.11½
Turpentine†.....gal.	1.04	1.05
Rosin, B. N. Y.....Bbl.	14.65	14.50
Rosin, F. N. Y.....Bbl.	15.60	15.10
Rosin, B†.....Bbl.	13.15	13.00
Rosin, F†.....Bbl.	13.50	13.60
Rosin Oil 1st run.....gal.	.78½	.76½
Rosin Oil 2nd run.....gal.	.83½	.81½

Pine Tar—

Kiln Burnt.....Bbl.	15.50	15.50
Retort.....Bbl.	15.50	15.50

†Savannah, Ga. market.
*Nominal.

Alcohol—Denatured Formula 5

Bbls.....gal.	.45	46
Drums.....gal.	.39	40

Sulfuric Demand Grows; Alcohol is Weak

NEW YORK, Jan. 18.—Following is a review of the market for oils and supplies used in compounding and refining:

Alcohol weak. Denatured available 1 cent below prices. Production large but demand strictly hand-to-mouth. Anti-freezing mixture makers purchasing sparingly. Wood alcohol flat.

Animal oils. Steady. Prime lard oil advanced ¼ cent. Now 18⅛ cents pound. Demand slightly better. Other lard oils unchanged. Neatsfoot oil marking time at same prices. Better inquiry for oleo stearine at 13½ cents. Domestic degras firm at 4¾ cents. Tallow oil lagging. Oleic acid movement slightly larger.

Caustic soda weak. Buyers holding off for concessions. Stocks large. Export demand disappointing.

Sal soda quiet. Prices steady. Little interest in spot offerings. Better inquiry for future deliveries.

Fish oils quiet. Crude menhaden oil still 52½ to 55 cents gallon, tanks factory. Light pressed demand slightly better 70 cents a gallon, barrels. White bleached marking time. Whale oil steady, quiet.

Sulfuric acid demand picking up but prices unchanged. Demand for future delivery slightly better. Spot stocks moderate.

Bleaching powder quiet. Trifle easier. Business chiefly against old contracts. stocks fair.

Linseed oil weak. Buyers holding off for pending break in prices. Weakness in flaxseed due to heavy Argentine crop. Crushers offering freely but buyers fail to take hold. Soya bean oil dull. Slightly easier.

Naval stores firm. Slight reactions in turpentine have failed to dispell bullish sentiment. Demand good. Spot stocks small. Southern markets advancing. Rosins in better demand. Southern stocks declining, and higher prices expected. Rosin oils quiet, but firm.

Benzol Market Bullish Not Exclusive

NEW YORK, Jan. 18.—Distributors of motor benzol are more bullish on the outlook, claiming that the present season is much more active than usual. As big consumers are bound to renew their 1926 contracts shortly, there is little or no chance of a recession in prices for some time.

In tank cars at the coke ovens, leading marketers are still asking 23 to 24 cents a gallon. Jobbing demand is more spirited and smaller buyers report increasing difficulty in locating supplies. Pure and 90 per cent benzol is in good demand at unchanged prices.

TULSA, Jan. 18.—The Marland Refining Co. will double the size of its present office building at Ponca City during 1926. Rapid expansion of the business of the company has caused a number of the offices to be moved uptown recently. The present building was contructed in 1918 at a cost of $500,000.

TULSA, OKLA.—H F. Miller, buyer for the Carter Oil Co., with headquarters in Tulsa, has left with his family for California where he will spend the winter and spring, looking after certain business for his company.

Los Angeles Oil Shipments Increase 3%

LOS ANGELES, Jan. 18. — During 1925 104,540,767 barrels of petroleum products were shipped from Los Angeles Harbor, which was a three per cent increase over the total amount shipped the year previous. Approximately 1,000,000 barrels of crude oil were shipped each week, totaling 53,043,503 barrels for the year. Gasoline shipments were 15,453,914 barrels. There were also 2,393,488 barrels of kerosene, 1,292,885 barrels diesel oil and 3,141,436 barrels of fuel oil shipped.

Of the gasoline shipped 7,835,561 barrels went to the Atlantic coast of the United States.

There have been no price changes during the week. The entire market situation is colorless. The decline in the crude oil production is the most benefical thing which has happened to the industry in the last three years.

Some marketers think that there will be another price advance in gasoline throughout the entire Pacific Coast before many weeks.

SAPULPA, OKLA., Jan. 18.—J. O. Snowden, land department local representative here for the Prairie Oil & Gas Co., has the sympathy of his many friends in the loss of his father, who died suddenly Jan. 5. The elder Snowden, who was 74 years of age, was born in Cole county, Ill., coming to Oklahoma 35 years ago. He lived on a farm near Stillwater.

CINCINNATI, O.—The Tresler Oil Co. has leased three service stations here during the past month.

OIL STOCKS AND FINANCES

National Petroleum News

Beacon Oil Finances Improvements to Issue of Common Stock

CLEVELAND, Jan. 18. A SYNDICATE of eastern bankers is offering 300,000 shares of Beacon Oil Co. no par common stock at $19 a share. This issue will bring the company's outstanding common stock up to 704,000 shares. Issues senior to the common stock consist of:

6½ per cent serial gold coupon purchase money notes maturing April 1, 1927, and later, $625,000;

6½ per cent first mortgage sinking fund gold notes of Colonial Filling Stations, Inc., due 1933, $750,000;

real estate mortgages, $38,000, and

7½ per cent cumulative preferred stock, $2,412,600.

Concerning the company's operations and earnings, Chairman Clifford M. Leonard wrote the bankers:

"The Beacon Oil Co., organized in May, 1919, under the laws of Massachusetts, is engaged in the transporting, refining and marketing of petroleum products. Over 75 per cent of the products produced by the refinery is sold direct to ultimate consumers. The major outlet for gasoline and motor oils is through the company's chain of Colonial Filling Stations which are now represented in the principal cities of New England. In addition to 160 stations operated directly by the company there are 800 dealers handling the Colonial gasoline and Beacon motor oils. The company's sales, eliminating inter-company accounts are now running at the rate of $15,000,000 per annum.

"The Beacon Sun Co., 50 per cent of whose voting common stock is owned by Beacon Oil Co., owns over 55 concessions in Venezuela, upon part of which property drilling is already in progress.

"For the five years and four months ended Oct. 31, 1925 the average annual net earnings applicable to the total amount of common stock to be outstanding, after depreciation and federal taxes at present rates, exceed $2.00 per share, notwithstanding the low results of the last two years.

"After completion of refinery improvements now under way and without reference to possible developments in Venezuela, it is expected that net earnings applicable to common stock will show an improvement over the average rate mentioned above, assuming normal conditions in the industry in New England."

The stock is listed on the Boston Stock Exchange and application will be made to list it on the New York Curb Market, it is said.

Pacific to Distribute Associated Stock

CLEVELAND, Jan. 18.—Stock holders of Pacific Oil Co. of Jan. 26 record are to receive on March 6 $3 cash and a two-fifths share of Associated Oil Co. stock per share of Pacific held. Announcement of this plan of disposing of Pacific's holdings in Associated sets at rest rumors that Pacific might dispose of control of the Associated to a banking syndicate when its merger with the Standard Oil Co. of California is completed.

The Pacific originally held 1,229,575 shares of Associated but, since first announcement of the merger plan, Pacific has traded some of its properties to Associated for Associated stock. The Standard has been a large stockholder in Pacific since the latter company was organized. No official announcement of the amount of stock held has ever been made but reports in Wall Street are that it totaled 700,000 shares or 20 per cent of the total Pacific stock outstanding. Standard has announced that it will dispose of the Associated shares it received from Pacific immediately. If Standard owns 700,000 shares of Pacific it will receive 280,000 shares of Associated.

Stockholders of Standard will meet Feb. 10 to pass on the consolidation plan and Pacific stockholders will meet Feb. 26. The merger is to be effective as of Jan. 1.

Under the proposed plan a new company will be organized and one share of stock in it will be exchanged for each share of Pacific and each share of Standard outstanding on Jan. 1. Pacific had outstanding on that date 3,500,000 shares and Standard 9,516,434. The consolidated company will have all of the assets of the Standard and all of the producing properties and leases of the Pacific. The Pacific stock of consolidated company received from the Standard may be either sold from the treasury or canceled, according to a statement of the Standard issued in San Francisco.

Price Ranges, Closes, and Changes During 1925 of Independent Stocks on New York Curb

Stocks	High	Month	Low	Month	Close	Change over Year
Amer. Marcaibo	11¼	July	2½	Mar.	7¼	.....
Ark. Nat Gas	8⅜	Feb.	5	Apr.	6⅜	+ ½
British-Amer	47¼	Nov.	38	Aug.	47¼	+11¾
Carib Syndicate	10¼	Dec.	2¾	Mar.	10¼	+ 6⅜
Cities Service new	43	Feb.	35	Mar.	38⅜	.....
do bankers	21⅜	Feb.	17½	Mar.	19	+ 1
do pfd	85⅛	Nov.	80¼	Jan.	84	+ 3¼
do pfd B	8	Aug.	7¼	Mar.	7½	.....
do pfd BB	85	Aug.	75	Mar.	75	— 2
Colombia Synd	2⅝	Nov	.60	Jan.	2½	+ 1¾
Creole Syndicate	15	Dec.	8¼	Jan.	15	+ 5¼
Crown Central	12¼	May	5	Dec.	5¼	.....
Derby Oil & Ref	7	Feb.	2	Nov.	2½	—2½
do pfd	27	Feb.	10½	Dec.	10½	—16
Gibson Oil	6	Dec.	1⅜	Jan.	5½	.....
Gilliland ctfs	3¾	Mar.	1⅜	Nov.	1¼	— 1½
Gulf Oil	98¼	Dec.	63½	Mar.	91½	+25½
Kirby Petroleum	5⅞	Jan.	2¼	Sept.	2⅝	— 1⅞
Lago Oil & Trans	23	Dec.	17⅞	Dec.	22¾	.....
Lago Petroleum	11¾	Dec.	4⅜	June	11⅜	+ 5¼
Leonard Oil	13	Oct.	6	Oct.	11	.....
Lion Oil Ref	25⅞	Nov.	18	Oct.	25⅛	.....
Lone Star Gas	51	Dec.	32¼	Jan.	51	+18¼

Stocks	High	Month	Low	Month	Close	Change over Year
Marland of Mexico	4¼	Feb.	1¾	Jan.	3⅞	+2¼
Mexican-Panuco	5¾	Nov.	.56	May	4	+ 3½
Mountain & Gulf	2	Mar.	1⅛	Jan.	1⅝	+ ⅝
Mountain Prod	26¼	Dec.	18⅜	Jan.	25⅜	+ 7
New Bradford	6¾	Dec.	3⅜	Jan.	6¼	+ 2⅝
N. England Fuel new	8⅞	Oct.	4¾	Dec.	5	.....
N. Mex. and Ariz. land	19⅜	Sept.	6¼	Jan.	15	+ 8⅜
New York Oil	12¼	June	8¼	Feb.	11⅝	+ 3⅜
Peer Oil	2½	Dec.	.90	May	2⅜	+ 1⅜
Pennok Oil	28¼	June	16	Oct.	22⅜	+ 5⅜
Red Bank Oil	44½	June	16	May	18½	— 3
Reiter-Foster	33½	June	9	Sept.	20¾	.....
Ryan Consolidated	9½	Mar.	3½	Jan.	6⅞	+ 3¾
Salt Creek Consol	9¾	Dec.	6¼	Sept.	9¼	+ 2⅞
Salt Creek Prod	35	Dec.	24	Jan.	34⅜	+10⅜
Savoy Oil	3⅞	Jan.	1	Nov.	1⅝	— ¾
Tidal Osage	13¾	Feb.	9	July	10	+ 1
do non-voting	10⅞	Feb.	9	July	9⅞	+ 1⅞
Venezuelan Pet	4⅞	July	1¾	Sept.	4¼	+ ⅞
Ventura Cons	24½	June	20	Sept.	22⅝	+ 1⅜
Wilcox Oil & Gas	31¼	June	22⅛	June	26½	.....
Woodley Petroleum	7	Feb.	3⅞	Mar.	5⅝	.....

Transactions In Oil Shares on New York Stock Exchange

1924 High	1924 Low	1925 High	1925 Low		Listed Capital	Par Value	Stocks	Div. Rate	Last Paid	Trasactions week ended Jan. 16 Sales	First	High	Low	Last	Ch'ge
48	25	76	48	(sh)	200,000	N.P.	American Republics	.....	.....	100	70	70	70	70	+1
34⅝	27½	45⅝	32	$	56,000,000	$25	Associated Oil	50cQ	Jan. 25, 26	86,400	52¼	52¾	48¾	52¾	+1½
140⅜	78½	117½	95½		50,000,000	100	Atlantic Refining	.....	June 16, 24	2,600	107¼	107¾	105	105	—2¼
118	108	117¾	113½		20,000,000	100	do pfd	$1¾Q	Nov. 2, 25	.....	.....	.....	.....	.....	.....
28½	14	32⅝	18¾		18,428,350	25	Barnsdall Corp. A	50cQ	Jan. 2, 26	77,600	32	32⅞	30½	30¾	—1¼
17½	10	28⅜	16		3,713,275	25	do B	50cQ	Jan. 2, 26	2,000	28¾	28¾	26¼	26¼	—2¼
4¼	1	2⅜	¼	(sh)	150,000	N.P.	Caddo Central O. & R	.....	.....	5,000	¾	¾	½	½	— ¼
29¼	19½	32⅝	23⅞	$	30,549,925	$25	California Petroleum	50cQ	Dec. 1, 25	44,700	32⅝	33¼	31¼	31½	—1⅜
68⅛	31⅜	66⅝	42½		19,832,300	100	General Asphalt Co	.....	.....	66,700	71⅝	73	66½	67½	—3½
100	71½	105½	86½		7,416,000	100	do pfd	$1¼Q	Dec. 1, 25	1,700	111⅞	113¾	109	110	—1
45	38⅜	59	42		29,194,650	25	General Petroleum	75cQ	Dec. 15, 25	98,000	58¾	59	54¾	55	—3¾
82½	61	85	59		25,000,000	100	Houston Oil Co	.....	.....	4,100	70¾	72	69¼	69	—1⅜
16¼	5¾	40½	13½	(sh)	500,000	N.P.	Independent Oil & Gas Co	25cQ	Jan. 11, 26	31,000	32¼	32⅜	24½	26	—6⅜
7⅜	3¾	14½	5½	$	3,256,590	$10	Indian Refining Co	.....	Dec. 15, 20	5,200	12	12⅛	11⅜	11⅜	—1⅛
75	60	110	77		2,296,400	100	do pfd	.....	Dec. 15, 21	100	104	104	104	104	0
1	¼	1½	¼		1,678,760	10	Kansas & Gulf Corp	.....	.....	2,100	⅝	⅝	½	⅝	— ⅛
.....	.....	23¾	13⅝	(sh)	1,078,166	N.P.	Louisiana Oil Refining	.....	.....	11,400	18⅛	18¼	16⅞	17¾	— ⅛
37½	24⅝	35½	20⅜	(sh)	330,000	N.P.	Maracaibo Oil	.....	.....	8,300	27¼	27¼	25	25	—2¼
42	29	60	32⅝	(sh)	1,885,343	N.P.	Marland Oil Co	$1Q	Dec. 31, 25	80,200	58⅞	58⅞	55½	56	—2¾
190	190	250	225	$	45,942,800	$100	Mexican Petroleum Co	$3Q	Jan. 20, 26	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....		12,000,000	$100	do pfd	$2Q	Jan. 20, 26	.....	.....	.....	.....	.....	.....
25¾	14¾	22¾	9	(sh)	945,989	N.P.	Mexican Seaboard Oil	.....	Nov. 15, 24	3,900	11⅜	11⅜	10⅝	10⅝	—1¼
40¼	22⅝	38	26	(sh)	1,357,800	N.P.	Mid-Continent Petroleum (Cosden)	.....	Aug. 1, 23	31,000	35½	35½	34	34¼	—1½
95	80	94¼	83	$	6,718,000	$100	do pfd	$1¼Q	Dec. 1, 25	200	94½	95	94½	95	+1
6⅞	1	3¾	⅝	$	26,013,700	10	Middle States Oil Corp	.....	July 1, 23	26,900	2⅜	2⅜	1⅝	1¾	— ⅛
58¼	45	65¼	51⅜	(sh)	3,500,000	N.P.	Pacific Oil Co	$1.50S.A.	Jan. 20, 26	121,600	78¼	78¼	75½	76⅛	—1⅝
65	44¼	83⅞	59½	$	48,307,400	$50	Pan American P. & T	$1.50Q	Jan. 20, 26	13,800	67	71	67	68¾	—2¼
64⅝	41¾	84½	60⅜		90,476,200	50	do Class B	$1.50Q	Jan. 20, 26	121,100	69	72⅜	68½	69⅞	—1⅞
.....	.....	47½	41¾	(sh)	400,000	N.P.	Pan American Western B	.....	.....	11,700	41⅜	41⅞	x40⅛	40⅜	— ¼
4⅜	1⅝	6¼	2¼	(sh)	198,770	N.P.	Panhandle P. & R	.....	.....	1,400	5¼	5¼	4¾	5	— ¼
42½	29	60½	37	$	2,935,200	$100	do pfd	.....	July 2, 23	200	53¾	54	53¾	54	—1
42½	28½	47⅜	36¼	(sh)	1,925,152	N.P.	Phillips Petroleum	75cQ	Jan. 2, 26	45,400	45⅜	45⅜	43¼	43¼	—1⅞
4½	1½	3⅜	1¼	$	29,622,925	$25	Pierce Oil Corp	.....	.....	4,600	1⅝	1⅝	1½	1½	0
36	20	40	20¼		15,000,000	100	do pfd	.....	Feb. 1, 22	.....	.....	.....	.....	.....	.....
5¾	4⅜	8¼	4½	(sh)	2,500,000	N.P.	Pierce Petroleum	.....	.....	9,200	5⅜	5⅜	5	5¼	+ ⅛
43½	22¾	32⅝	12⅞	$	11,467,850	50	Producers & Refiners	.....	Sept. 15, 23	2,600	16	16	14⅝	15⅝	+ ⅛
47½	42	47⅜	27		2,845,350	50	do pfd	.....	May 1, 25	200	33	33	32¼	32¼	—2¼
30½	20	33¾	25⅛		75,959,250	25	Pure Oil Co	37½cQ	Dec. 1, 25	33,400	30⅜	30¾	29⅛	29⅛	—1⅝
105¼	92	108½	103		13,000,000	100	do 8% pfd	$2Q	Oct. 1, 25	400	107	107¼	107	107	0
59½	40⅜	57⅜	48¼	(sh)	820,436	13.40	Royal Dutch, N. Y. shares	$1.73½	Aug. 1, 25	9,200	56⅝	56⅝	53¼	53¼	—2¾
42	33	46¾	39½	(sh)	105,575	£2	Shell Transport & T	96½c	Jan. 22, 26	800	48⅛	48¼	x46⅜	46⅝	—1⅜
22½	15¾	28⅜	21⅝	(sh)	10,000,000	N.P.	Shell Union Oil Corp	35cQ	Dec. 31, 25	35,600	27⅞	27⅞	25⅝	25¾	—2
99½	91½	106½	99½	$	20,000,000	$100	do pfd	$1½Q	Nov. 16, 25	500	104	105	104	104	— ¼
24	10⅜	26¾	18⅝		7,207,090	10	Simms Petroleum Co	50cS.A.	Jan. 2, 26	24,700	26½	26½	24¾	24¾	—1¾
27⅛	15	24⅞	17	(sh)	4,484,450	N.P.	Sinclair Consolidated	.....	May 31, 24	70,800	22¼	23¼	21½	21⅞	— ⅛
90	75	94⅜	78¾	$	18,190,200	$100	do pfd	$2Q	Nov. 16, 25	1,000	92	93	91⅛	92	0
29	17⅜	32½	21¾		20,966,500	25	Skelly Oil Co	50cQ	Dec. 15, 25	22,600	31¼	31¾	30	30	— ¼
68½	55½	67¾	51½		236,869,225	25	S. O. California	50cQ	Dec. 15, 25	81,100	59⅛	59½	57¼	57½	—1½
42½	33	47½	38⅜		511,631,025	25	S. O. New Jersey	25cQ	Dec. 15, 25	49,500	45⅜	45¼	43¾	43⅞	—1⅜
119⅜	115¾	119	116¼		199,972,900	100	do pfd	$1¾Q	Dec. 15, 25	2,700	117¼	117⅜	117	117	— ¼
.....	.....	43⅞	38⅛	(sh)	1,034,373	N.P.	Sun Oil	25cQ	Dec. 15, 25	1,400	39⅛	40	38⅛	38⅛	—1¾
8⅛	2⅜	6⅜	2½	(sh)	1,121,368	N.P.	Superior Oil Corp	.....	Dec. 20, 20	6,300	3⅞	4	3¼	3⅝	0
45⅜	37¾	53½	42¾	$	164,450,000	$25	The Texas Co	75cQ	Dec. 31, 25	36,300	53	53	51⅜	51½	—1
15¼	8	23⅜	10⅞		8,380,340	10	Texas Pacific Coal & Oil	.....	June 30, 23	25,600	19	19	16⅞	16⅞	—1⅞
.....	.....	36⅞	30¼	(sh)	2,017,719	N.P.	Tide Water Oil Co	25cQ	Dec. 31, 25	14,200	34⅞	36	34¼	35¾	+1
.....	.....	101	99½	$	25,059,000	$100	do 5% pfd	$1.25Q	Nov. 16, 25	1,300	99½	99⅞	99	99⅞	+ ⅜
6¼	3¾	5⅞	3½	(sh)	3,742,029	N.P.	Transcontinental Oil Co	.....	.....	20,500	4⅜	4⅜	4	4⅛	— ⅛
39	35	43⅜	33	$	40,480,800	$25	Union Oil of California	45cQ	Nov. 10, 25	14,700	39¼	39⅜	37½	37⅝	—1⅜
132⅞	94	134	96¼		18,262,300	100	Union Tank Car Co	$1¼Q	Dec. 1, 25	800	92	94	92	92	0
116¾	106¼	117⅜	113¼		12,000,000	100	do pfd	$1¾Q	Dec. 1, 25	.....	.....	.....	.....	.....	.....
29⅜	23⅛	31¾	25½	(sh)	490,000	N.P.	White Eagle Oil & Ref	50cQ	Jan. 20, 26	2,300	27½	27⅞	26½	26½	—1⅜

*New High †New Low xEx-dividend Total Sales 2,050,200

Standard Oil Stock Traded In New York Curb Market

1924 High	1924 Low	1925 High	1925 Low		Outstanding Capital	Par Value	Stocks	Div. Rate	Last Paid	Transactions week ended Jan. 15 Sales	First	High	Low	Last	Ch'ge
13¾	14⅜	26⅜	17¼	£	3,000,000	£1	Anglo American	32.4cS.A.	Jan. 4, 26	2,700	19½	19½	18¾	19	— ¼
4⅞	2	4	1⅜	(sh)	500,000	N.P.	Atlantic Lobos	.....	.....	700	2	2⅛	2	2⅛	+ ⅛
16	5	12¾	3	$	10,000,000	$10	do pfd	.....	.....	200	4	4	3⅞	4	0
265	155	240½	205		1,000,000	$100	Borne-Scrymser	‡$4S.A.	Oct. 15, 25	10	227	227	227	227	—5
85½	51	72	53½		10,000,000	50	Buckeye Pipe Line	$1Q	Dec. 15, 25	350	55¾	55¾	55¼	55¾	0
52½	47⅜	74⅜	48½		3,000,000	25	Chesebrough Mfg. Co	62½cQ	Dec. 29, 25	300	69½	69½	69	69	—1
115	112	115	110		1,000,000	100	do pfd	$1¾Q	Sept. 30, 25	.....	.....	.....	.....	.....	.....
.....	.....	31⅝	21⅞		34,914,280	$10	Continental Oil (Maine)	25cQ	Dec. 15, 25	17,500	25	25	24¼	24¼	— ¾
20	11¼	17½	10½		1,500,000	25	Crescent Pipe Line	.....	Sept. 15, 23	.....	.....	.....	.....	.....	.....
149	110¾	156	132		3,000,000	100	Cumberland Pipe Line	$3Q	Dec. 15, 25	10	135	135	135	135	—2
105	74	96	61		5,000,000	100	Eureka Pipe Line	$1Q	Nov. 2, 25	.....	.....	.....	.....	.....	.....
69¾	52	65	23½		16,000,000	100	Galena Signal Oil	.....	June 30, 25	3,400	29	31½	28	30	+1¾
118	100½	105	88		4,000,000	100	do new pfd	$2Q	Dec. 31, 25	20	93	94½	93	94½	+4½
116	110	114	95		2,000,000	100	do old pfd	$2Q	Dec. 31, 25	180	94½	97½	94½	97	+1
43¾	34½	95	42½		43,750,000	25	Humble Oil & Ref	30cQ	Jan. 1, 26	34,900	96¼	96½	89¼	89¾	—6⅛
161	120	154½	127		20,000,000	100	Illinois Pipe Line	$6S.A.	Dec. 31, 25	140	135¼	136¾	135¼	136¾	+1¾
.....	.....	39¼	27¾	(sh)	6,491,852	N.P.	Imperial New	25cQ	Dec. 1, 25	13,400	37½	37¾	35¾	36½	— ¾
100	66	84	57⅜	$	5,000,000	50	Indiana Pipe Line	$1Q	Nov. 14, 25	350	58	60	58	59	+ ½
24¾	16¾	35⅜	22¾	(sh)	7,118,138	N.P.	International Petroleum	25c	Sept. 30, 25	48,300	34	34¼	32½	32⅝	— ⅜
162	122	190	130½	$	188,247,100	100	Magnolia Petroleum	1%stk.	Oct. 5, 25	.....	.....	.....	.....	.....	.....
25⅞	20⅝	25½	16½		6,362,500	12½	National Transit	25cS.A.	Dec. 15, 25	1,900	18½	20¾	18½	20½	+2¼
97	54½	79	49⅜		5,000,000	100	New York Transit	75cQ	Jan. 15, 26	50	49	49	49	49	0
107½	72	88	67½		4,000,000	100	Northern Pipe Line	$3S.A.	Jan. 1, 26	200	71½	71½	70¾	70¾	— ¼
79½	55	75	60¼		60,000,000	25	Ohio Oil Co	50cQ	Dec. 31, 25	2,100	65½	65½	63½	63½	—1¼
43	27	44½	19		10,000,000	25	Penn. Mex. Fuel	50c	May 21, 25	300	20	20	20	20	0
54¾	49¼	65½	45⅞		60,000,000	25	Prairie O. & G	.....	July 31, 25	10,700	56⅞	57½	55	55	—1⅞
111	100	129¾	106		81,000,000	100	Prairie Pipe Line	$2Q	Oct. 31, 25	750	127	127	126	126	—1
230	175	259	200		4,000,000	100	Solar Refining Co	$5S.A.	Dec. 19, 25	170	205	205	202	203	—2
100	80½	103	29		10,000,000	100	Southern Pipe Line Co	$1Q	Dec. 1, 25	200	63¾	63¾	61½	62½	—1
171	117	197	139		20,000,000	100	South Penn Oil Co	$1.50	Dec. 31, 25	1,620	189	193	187	187	—2
89	68	84	50		3,500,000	100	Southwest Pa. Pipe Lines	$1Q	Dec. 31, 25	50	53¼	53¼	53¼	53¼	+ ¼
68⅛	54¾	70¾	59½		223,756,258	25	S. O. Indiana	62½cQ	Dec. 15, 25	47,900	67⅞	68⅜	65⅞	66¼	—1⅜
30½	32½	46	30⅜		8,000,000	25	S. O. Kansas	.....	June 16, 24	2,800	35	35	33¼	33⅞	—1⅛
121¼	101	137	114¾		16,864,434	25	S. O. Kentucky	$1Q	Dec. 31, 25	3,700	132½	132½	125⅛	125¾	—7¼
262	198	270	231		3,000,000	100	S. O. Nebraska	$5S.A.	Dec. 19, 25	10	245	245	245	245	0
48	37¾	48⅝	40		227,535,300	25	S. O. New York	35cQ	Dec. 15, 25	19,600	46¼	47¼	46⅛	46⅛	— ¼
377½	275	369	338		14,000,000	100	S. O. Ohio	$2½Q	Jan. 1, 26	100	355	355	348	348	—7
336	115	123	116		7,000,000	100	do pfd	$1¾Q	Dec. 1, 25	50	117	117½	117	117½	+ ½
81	20	27	12½		1,722,931	25	Swan-Finch Oil Corp	.....	Nov. 1, 19	.....	.....	.....	.....	.....	.....
83½	56½	109½	80⅜		61,919,950	25	Vacuum Oil Co	‡50cQ	Dec. 19, 25	9,300	107½	107¾	103½	105¾	—1½
30	25	35	30		100,000	10	Washington Oil Co	$2	Dec. 31, 25	20	60	65	60	65	+10

Borne Scrymser $2 extra April 15 $4 extra Oct. 15 ‡Vacuum 50c extra Mar. 20, June 20, Sept. 19 Dec. 19 Dec. 19 special $1 Dec. 19 S. O. Neb. $10 extra Dec. 19 special $1 Dec. 19 S. O. Neb. $10 extra Dec. 19 Ohio Oil 50c extra Dec. 31. Chesebrough 62½c extra Dec. 29

Financial Notes

Marland Oil Co.—Net earnings of the Marland in the first 11 months of 1925 were $15,500,000, after all charges and reserves equivalent to approximately $8.20 a share on the 1,893,387 shares now issued, says the Wall Street Journal. Last year the balance shown, after some unusual reserves, was $354,305 or 22 cents a share on the 1,549,961 shares then issued.

Mid-Continent Petroleum Co.—According to reports published in the Wall Street Journal earnings of this company have been 75 per cent greater than in 1924.

Phillips Petroleum Co.—All but 2,600 shares of the 481,416 recently offered stockholders at $40 a share were subscribed to by holders. This left the underwriter, Blair & Co., less than 1 per cent of the offering.

Eureka Pipe Line Co.—Annual meeting will be held Jan. 26 at Oil City, Pa.

Skelly Oil Co.—Production in first 10 months of 1925 totaled 4,244,625 barrels, compared with 3,969,312 barrels in all of 1924. The daily average production for the 10 months of 1925 was 13,962 barrels.

Standard Oil Co. of California.—Standard-Pacific Oil Co. merger declared effective as of Jan. 1 but 60 days or more time will be necessary to work out details, it was announced by Henry W. de Forest, chairman of the board of the Pacific.

Standard Oil Co. of Nebraska.—All retiring directors re-elected at annual meeting. All officers subsequently re-elected.

Tide Water Oil Co.—Announces it does not contemplate exchanging its common stock for remaining outstanding common stock of its subsidiary, the Tidal Osage Oil Co.

Crescent Pipe Line Co.—Liquidation is not expected to be complete until late next summer. Company has already torn up 51½ miles of pipe line and 222 miles of line remain to be torn up. This company decided to cease business when tanker shipments of crude to Atlantic seaboard refineries cut off a large part of its business.

Skelly Oil Co.—W. G. Skelly, president, is again quoted in Tulsa dispatches as saying rumors that his company would enter a merger are entirely unfounded.

Oil Dividends

	Amt.	Payable	Stock of Record
Royal Dutch interim	$1.339	Jan. 29	Jan. 15
Shell Union pfd. q	$1.50	Feb. 15	Jan. 26
Sinclair Cons. pfd. q	$2	Feb. 15	Feb. 1
S. O. Ohio pfd. q	$1.75	Mar. 1	Jan. 29

New York Bonds

Week Ending Jan. 15

	High	Low	Last	Ch'ge
Amer Rep Cor deb 6s	99	98½	99	+1
Associated Oil gold 6s	103⅜	103	103	+ ¼
Atlantic Refg deb 5s	100¼	99¾	99¾	— ½
Barnsdall Corp. 8s	106⅛	104⅞	105⅜	— ⅛
Calif Petrol sf 6½s	104½	104⅜	104⅜	— ⅛
Empire Gas & Fuel	102½	102	102¼	— ⅜
Humble Oil & R 5½s	102½	102	102⅛	— ⅜
Mid-Cont Pet 6½s	102	101¾	101¾	— ⅛
Pan-Amer P & T 7s	106¾	106¼	106¾	+ ⅜
Pan-Amer P & T 6s	109	107	107½	—1⅜
Pierce Oil deb 8s	107¾	105¾	107¼	+3
Sinclair Con oil col 7s	95¼	94¼	95	+ ½
Sinclair Con oil con 6½s	89	87½	89	+1½
Sinclair Con oil 6s	111¼	108¼	108¾	— ⅝
Sinclair Crude Oil 6s	100¾	100½	100¾	+ ⅛
Sinclair Pipe Line sf 5s	88⅞	87¾	88⅞	+1⅜
Skelly Oil 6½s	108½	107⅜	108½	+1
Superior Oil 7s	92¾	92¾	92¾	— ¼
Union Oil of Calif 6s-A	104¾	104¾	104¾	0
Union Oil of Calif 5s-C	96¼	95¾	96¼	+ ½

New York Curb Bonds

Week Ending Jan. 15

	High	Low	Last	Ch'ge
Atlantic Gulf and w.i.5s	73½	73¼	73½	+ ⅜
Cities Service 6s	93⅛	92⅝	93	— ¼
Cities Service 7s C	126	126	126	0
Cities Service 7s D	101⅞	101½	101⅞	+ ⅜
Cities Service P & L 6s	94¼	93½	93⅞	— ¼
General Pet. 6s	103½	101⅝	101⅞	— ⅛
General Pet. 5s	94¼	93¼	94	+ ¾
Gulf Oil 5s	100	99⅝	99¾	— ½
Gulf Oil 5½s '27	100½	100½	100½	0
Gulf Oil 5½s '28	101⅝	100⅞	101⅝	+ ⅜
Phillips Pet 7½s w w	104	104	104	0
Pure Oil 6½s	103	102½	103	+ ⅝
S O N Y 6½s	106⅞	106⅜	106⅜	— ⅛
Sun Oil 5s '25	98½	98	98	0
Tidal Osage 7s	104¾	104	104	— ½
Trans Cont Oil 7s	98	97	97	— ¾
Vacuum Oil 7s	104⅝	104¼	104⅜	— ⅛
Valvoline 7s	103½	103½	103½	0

New York Curb Market

1924 High	1924 Low	1925 High	1925 Low	Par Value	Stocks	Transactions week ended Jan. 15 Sales	First	High	Low	Last	Ch'ge
.....	.....	11¼	2½	....	Amer. Maracaibo	108,900	1⅜	1 4¼	11⅞	13⅞	+2⅞
7	4	8⅜	5	$10	Arkansas Nat. Gas	900	6½	6⅝	6½	6½	0
36⅝	32	45¼	38	$5	British-American	.....	.....	.....	.....	.....	.....
6⅝	2¾	7½	2¾	25c	Carib. Syndicate	96,000	14⅞	15¾	13⅞	14⅝	+ ⅜
.....	.....	43	35	$20	Cities Service	7,600	38⅛	38¼	37⅞	38	— ⅛
82⅞	67¾	85⅜	80¼	100	do pfd	1,100	83¾	84	83¾	83¾	— ¼
7¾	6⅜	8	7½	10	do pfd. B	.....	.....	.....	.....	.....	.....
19	13¼	21⅜	17½	10	do bankers' sh	200	19⅛	19⅛	19	19	— ⅛
1⅛	.25	2⅝	.60	N.P.	Colombia Syndicate	117,100	3¼	3 1/16	2 11/16	3	— 1/16
10⅝	2¼	14⅝	8¼	N.P.	Creole Syndicate	15,500	14⅜	14⅞	14	14¼	— ⅛
.....	.....	12¼	5	N.P.	Crown Central	5,300	5¾	6½	5½	6	+ ½
8	1½	7	2	N.P.	Derby Oil & Ref	1,000	2¾	3¾	2¾	3	+ ⅜
34¼	17½	27	14⅞	N.P.	do pfd	.....	.....	.....	.....	.....	.....
.....	.....	6	1⅜	N.P.	Gibson Oil	36,600	5¾	6¼	5½	6¼	+ ½
5¾	1¾	3¾	1⅛	N.P.	Gilliland v.t.c	200	1¾	1¾	1¾	1¾	0
67⅜	56	94½	63½	$25	Gulf Oil Corp	9,800	92¼	92⅞	90½	90½	—1
7	1⅜	5⅞	2¼	N.P.	Kirby Petroleum	1,400	2¾	2¾	2¼	2½	— ¼
6¾	2⅞	11¾	4⅛	N.P.	Lago Petroleum	90,200	11¾	11¾	10½	11⅛	— ⅝
.....	.....	25⅞	18	N.P.	Lion Oil Refining	1,200	24½	25	24¼	24¼	— ½
4⅞	4	4¼	1¾	N.P.	Marland of Mexico	.....	.....	.....	.....	.....	.....
1¾	.50	5¾	.56	$10	Mexican-Panuco	11,000	4⅜	4½	4	4¼	— ⅛
1⅝	.97	2	1	1	Mountain & Gulf	200	1⅝	1⅝	1⅝	1⅝	0
20¾	16	26¼	18⅜	10	Mountain Prod	6,100	25¼	25⅜	24¾	24⅞	— ⅜
6¼	3½	6¾	3⅝	5	New Bradford Oil	3,900	6¼	6⅜	6¼	6¼	0
44	17	87⅞	43¼	10	New England Fuel	.....	.....	.....	.....	.....	.....
.....	.....	19⅜	6¼	1	New Mex. & Ariz	10,800	16	16	15	15	— ½
14	8⅛	12½	8¼	25	New York Oil	3,900	12⅞	17	12⅞	14½	+2
.....	.....	37	23¾	N.P.	Pan-Amer. Western	.....	.....	.....	.....	.....	.....
6	.70	2½	.90	N.P.	Peer Oil Corp	8,100	2⅜	2½	2⅜	2½	0
18¼	12¼	28¼	16	$10	Pennok Oil	700	22½	22½	22	22	— ¼
57¾	5¾	44½	16	25	Red Bank Oil	400	20	20	18	18	—2⅛
.....	.....	33½	9	N.P.	Reiter-Foster	3,100	18½	19⅜	14½	17⅛	—1⅞
5½	3	9½	3½	N.P.	Ryan Consolidated	1,600	7¼	7⅜	6¾	6¾	— ¼
10¼	6	9¾	6⅛	$10	Salt Creek Cons	9,000	9¼	9⅝	9⅜	9⅝	+ ⅜
27½	19⅛	35	24	10	Salt Creek Prod	8,800	35⅜	35½	33⅜	33⅜	—1⅝
3¾	1½	3⅞	1	5	Savoy Oil	.....	.....	.....	.....	.....	.....
.....	.....	46½	33¾	N.P.	Sun Oil	.....	.....	.....	.....	.....	.....
16¼	6¼	13¾	9	10	Tidal Osage	100	9	9	9	9	—1
4⅛	2⅝	4⅞	1¾	5	Venezuelan Pet	26,300	5½	5⅞	5⅜	5⅜	0
.....	.....	31¼	22⅛	N.P.	Wilcox O. & G. new	3,400	26⅞	27⅝	25½	25½	—1½
13⅞	4¾	7	3⅞	N.P.	Woodley Petroleum	500	6	6	5¾	5⅞	+ ⅛

Pittsburgh Stock Exchange

1924 High	1924 Low	1925 High	1925 Low	Par Value	Stocks	Transactions Week Ended Jan. 15 Sales	First	High	Low	Last	Ch'ge
8¼	5¼	7	6½	$10	Arkansas Nat. Gas	4,090	6⅝	6¾	6½	6½	— ⅛
73¼	69¼	.....	.....	N.P.	Columbia Gas	.....	.....	.....	.....	.....	.....
21½	21½	.....	.....	50	Consolidate Gas pfd	.....	.....	.....	.....	.....	.....
18	14½	17	16¼	$10	Devonian Oil	458	16¼	17	16¼	16⅞	+ ⅜
112⅝	105⅛	112½	112¼	$100	Duquesne Lt. 7s pfd	.....	.....	.....	.....	.....	.....
95	90	.....	.....	100	Fayette County Gas	.....	.....	.....	.....	.....	.....
55	32½	54¼	51¾	25	Lone Star Gas	4,724	52	54½	51¾	52¾	+ ¾
7	3¾	6½	6	....	do Rights	.....	.....	.....	.....	.....	.....
37¼	31	36½	35¼	25	Ohio Fuel Corp	2,434	36½	36¼	35¼	35½	— ¾
34	26	34	31⅞	25	Oklahoma Nat. Gas	5,008	33⅝	33⅝	31⅞	32½	—1⅝
8¾	5	5⅝	5½	5	Pittsburgh O. & G	100	5½	5½	5½	5½	0
9⅝	6	9½	9⅛	10	Salt Creek Cons	615	9¼	9½	9¼	9½	+ ¼
13¾	8½	.....	.....	10	Tidal Osage	.....	.....	.....	.....	.....	.....

Pittsburgh Curb Market

1924 High	1924 Low	1925 High	1925 Low	Par Value	Stocks	Transactions Week Ended Jan. 15 Sales	First	High	Low	Last	Ch'ge
20	18½	.....	.....	....	Central Ky. Gas	.....	.....	.....	.....	.....	.....
2½	.60	3⅜3	3	$ 5	Colombia Synd	10,650	3¼	3¼	3	3	— ¼
.60	.15	.....	.....	5	Duquesne Oil	.....	.....	.....	.....	.....	.....
9	5½	.....	.....	10	Forest Oil	.....	.....	.....	.....	.....	.....
92⅜	64	91½	90	25	Gulf Oil Corp	600	91½	91½	91½	91½	0
.....	.....	7½	6½	....	Houston Gulf Gas	4,200	6½	7½	6½	7⅜	+ ⅜
12½	3¼	11⅜	9¾	N.P.	Leonard Oil & Dvlp	.....	.....	.....	.....	.....	.....
2¾	1⅜	.....	.....	1	Oklahoma Eastern	.....	.....	.....	.....	.....	.....
¾	⅜	.....	.....	....	Okla. Eastern rts	.....	.....	.....	.....	.....	.....
1⅞	1⅞	.....	.....	....	Okla. Eastern ex-rts	.....	.....	.....	.....	.....	.....
.47	.20	.....	.....	10	Omar O. & G	.....	.....	.....	.....	.....	.....
27½	25	33	27	10	Plymouth Oil	1,270	32	32⅝	32	32	0
7	3	3	3	5	States Oil	743	3	3	3	3	0
4	1⅞	3	2⅝	$ 1	Texon Oil & Land	865	2¾	2¾	2⅝	2⅝	— ⅛
11	9	9½	9½	10	Tidal Osage	50	9½	9½	9½	9½	0

*New High †New Low xEx-Dividend

Louisiana Oil Getting Interest in Beacon

NEW YORK, Jan. 19.—Richard B. Kahle, president of the Louisiana Oil Refinery Co., has announced in a letter to stockholders that his company is acquiring a stock interest in the Beacon Refining Co.

"This association," Mr. Kahle said, "is an important and desirable connection for your company to make, offering an outlet for a surplus of our crudes and petroleum products."

Concerning the company's 1925 operations, Mr. Kahle said:

"For 1925 it has been necessary to make several adjustments and take some losses on the books, due to the affairs of prior years and these old adjustments we believe are now all taken care of and we expect a net profit of $1,200,000 applicable to the common stock after depreciation and depletion. We are entering 1926 with optimism and if the plan which we have outlined is consummated we believe that your position will be greatly strengthened."

Stockholders of Louisiana Oil Refining will meet Jan. 18 to vote on a proposal to create and issue $4,000,000 of 6 per cent convertible preferred stock, proceeds from the sale of which are to be used to retire $2,800,000 of 5½ per cent notes and for additional working capital.

The Beacon has a refinery at Everett, Mass., and distribution through retail stations through parts of New England. It also does a tank car business of considerable size.

The Beacon has placed on the temporary list of the Boston Stock Exchange 192,000 shares of stocks with authority to add 160,000 shares thereto. Further authority was granted to add 352,000 shares to the list as these may be issued as a stock dividend. There was no intimation that a stock dividend was at hand.

Phillips to Retire Debentures

NEW YORK, Jan. 19.—Phillips Petroleum Co. will call on or before April 1 all of the $3,200,000 outstanding 7½ per cent debentures at 104 and interest, the directors have decided. Debentures are to be presented to the Chatham & Phoenix National Bank of New York or the Central Trust Co. of Chicago for redemption. Retirement will leave the Phillips company without indebtedness except monthly bills.

Cleveland Stock Market

	Par	Jan. 15 Bid	Asked	Last Sale
Canfield Oil Co.	$100	108½	.....	115
do pfd. x	100	98¼	.....	100
Fred G Clark Co.	10	3¼	4⅜	5
National Refin. Co.	25	43	43¼	43
do pfd.	100	.....	135	121
Paragon Refin. Co.	25	8⅜	9	9½
do pfd.	100	63½	67½	65

x-Ex dividend

The Oil Industry Exchange

Positions Wanted

Refinery Executive, twenty three years wide and varied experience with Gulf Coast, Midcontinent and Mexican crudes, desires new connection. Age 38. Box 509.

Salesmanager of Cleveland oil concern will make immediate change. Could get several good salesmen. Can build up large volume of oil sales. Will cut your costs due to knowledge of blending and compounding. Cleveland only. A-1 References. Box 512.

Situations Open

Salesman

Long established oil company desires high type salesman having knowledge of spraying oils and with ability to sell such oils to consumers and supervise such department. Permanent position offered. Excellent opportunity to a man with ability and energy.

Box 511

Business Opportunities

New York Representation

Domestic and Foreign negotiations, oil purchases, sales, etc., handled by experienced organization on retainer or commission basis.

Alamo Petroleum Corp.
Two Broadway, New York
Cable Address, WARDALAMO

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My office is nothing more than a clearing house for Seller and Buyer of

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Telephones: 3-4177 and 3-4178.
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For "Position Wanted" advertisements—5 cents per word. Minimum cost $1.00. All other classified advertising—10 cents per word. Minimum cost $3.00. Advertisements set in special type or with border—$4.00 per column inch. Copy must reach us not later than Friday preceding date of issue. All advertisements carried on this page are payable in advance.

Want to Lease

Tank Car

Wanted to lease either two or three compartment tank car for lubricating oil. **Damascus Manufacturing Corporation, 9501 Cassius Avenue, Cleveland, Ohio.**

For Sale

Bulk Station For Sale, located in eastern Kansas town of over ten thousand population. For full particulars address "M"-P. O. Box 454, Arkansas City, Kansas.

Bulk Station For Sale

in Pennsylvania town. 50,000 gal. storage and plenty of room for expansion. Tank trucks and all necessary equipment. $18,000 cash. Address

Box 508
care National Petroleum News

Oil Jobbing Business

Curb pumps also drive-in filling station on Trunk Highway. Located in Eastern Minnesota. Pure Oil contract. For particulars address

Box 510
care National Petroleum News

Bulk Storage Plant For Sale—Drive-in station and equipment. Gasoline gallonage 450,000 per year; kerosene gallonage 75,000 per year. Good territory. Address Wm. B. Duff, Howe Gas and Petroleum Company, La Grange, Ind.

Have You Any Used Equipment to Sell?

If you have, National Petroleum News can put you in touch with buyers. Look over your old equipment, jot down what you don't need and send in a little "For Sale" advertisement.

The OIL INDUSTRY EXCHANGE is read by a large part of the oil industry each week. Many of these companies are looking for the very equipment you have to sell.

Advertisers having box numbers should be addressed in care of National Petroleum News, 817 Huron road, Cleveland, Ohio, unless otherwise specified.

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